DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Part 1

[REG–132210–18]

RIN 1545–BP11

Updated Life Expectancy and Distribution Period Tables Used for Purposes of Determining Minimum Required Distributions

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Notice of proposed rulemaking; notice of public hearing.

SUMMARY: This document sets forth proposed regulations providing guidance relating to the life expectancy and distribution period tables that are used to calculate required minimum distributions from qualified retirement plans, individual retirement accounts and annuities, and certain other tax-favored employer-provided retirement arrangements. These regulations affect participants, beneficiaries, and plan administrators of these qualified retirement plans and other tax-favored employer-provided retirement arrangements, as well as owners, beneficiaries, trustees and custodians of individual retirement accounts and annuities. This document also provides a notice of a public hearing on these proposed regulations.

DATES: Written or electronic comments must be received by January 7, 2020. Outlines of topics to be discussed at the public hearing scheduled for January 23, 2020, must be received by January 7, 2020.

ADDRESSES: Submit electronic submissions via the Federal eRulemaking Portal at *www.regulations.gov* (indicate IRS and REG–132210–18) by following the online instructions for submitting comments. Once submitted to the Federal eRulemaking Portal, comments cannot be edited or withdrawn. The Department of the Treasury (Treasury Department) and the IRS will publish for public availability any comment received to its public docket, whether submitted electronically or in hard copy. Send hard copy submissions to: CC:PA:LPD:PR (REG–132210–18), Room 5203, Internal Revenue Service, P.O. Box 7604, Ben Franklin Station, Washington, DC 20044. Submissions may be hand-delivered Monday through Friday between the hours of 8 a.m. and 4 p.m. to CC:PA:LPD:PR (REG–132210–18), Courier's Desk, Internal Revenue Service, 1111 Constitution Avenue NW, Washington, DC 20224.

FOR FURTHER INFORMATION CONTACT: Concerning the proposed regulations, Arslan Malik or Linda S.F. Marshall, (202) 317–6700; concerning submissions of comments and requests to speak at the public hearing, Regina Johnson, (202) 317–6901 (not toll-free numbers).

SUPPLEMENTARY INFORMATION:

Background

This document includes proposed amendments to the Income Tax Regulations (26 CFR part 1) under section 401(a)(9) of the Internal Revenue Code (Code) regarding the requirement to take required minimum distributions from qualified trusts. These proposed regulations also apply with respect to the corresponding requirements for individual retirement accounts and annuities described in section 408(a) and (b), and eligible deferred compensation plans under section 457, as well as section 403(a) and 403(b) annuity contracts, custodial accounts, and retirement income accounts.

Section 401(a)(9) provides rules regarding minimum required distributions from qualified retirement plans. The purpose of section 401(a)(9) is to ensure that the favorable tax treatment afforded a qualified plan is used primarily to provide retirement income to a participant and a designated beneficiary, rather than to increase the estate of a participant. Accordingly, section 401(a)(9) provides that a qualified plan must commence benefits to an employee no later than a specified age (or within a specified number of years after the employee's death) and, under the regulations, once benefits commence, the pattern of payment must meet certain standards to ensure that distributions are not unduly deferred.

Section 401(a)(9)(A) provides rules for distributions during the life of the employee. Section 401(a)(9)(A)(ii) provides that the entire interest of an employee in a qualified plan must be distributed, beginning not later than the employee's required beginning date, in accordance with regulations, over the life of the employee or over the lives of the employee and a designated beneficiary (or over a period not extending beyond the life expectancy of the employee and a designated beneficiary).

Section 401(a)(9)(B) provides rules for distributions that are made after the death of the employee. Section 401(a)(9)(B)(i) provides that, if the employee dies after distributions have begun, the employee's interest must be distributed at least as rapidly as under the method used by the employee. Section 401(a)(9)(B)(ii) and (iii) provide that, if the employee dies before distributions have begun, the employee's interest must be either (1) Distributed (in accordance with regulations) over the life or life expectancy of the designated beneficiary with the distributions beginning no later than 1 year after the date of the employee's death, or (2) distributed within 5 years after the death of the employee. However, under section 401(a)(9)(B)(iv), a surviving spouse may wait until the date the employee would have attained age 70½ to begin receiving required minimum distributions.

Section 401(a)(9)(C) defines the term *required beginning date* for employees (other than 5-percent owners and IRA owners) as April 1 of the calendar year following the later of the calendar year in which the employee attains age 70½ or the calendar year in which the employee retires. For 5-percent owners and IRA owners, the required beginning date is April 1 of the calendar year following the calendar year in which the employee attains age 70½, even if the employee has not retired.

Section 401(a)(9)(D) provides that, except in the case of a life annuity, the life expectancy of an employee and the employee's spouse that is used to determine the period over which payments must be made may be re-determined, but not more frequently than annually.

Section 401(a)(9)(E) provides that the term *designated beneficiary* means any individual designated as a beneficiary by the employee.

Section 401(a)(9)(G) provides that any distribution required to satisfy the incidental death benefit requirement of section 401(a) [1] is a required minimum distribution.

Under sections 403(b)(10), 408(a)(6), [2] and 457(d)(2), requirements similar to the requirements of section 401(a)(9) apply to a number of types of retirement arrangements other than qualified plans. Pursuant to sections 403(a)(1) and 404(a)(2), qualified annuity plans must also comply with the requirements of section 401(a)(9).

Comprehensive rules regarding the application of section 401(a)(9) are set

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[1] The incidental death benefit requirement, which is set forth in § 1.401–1(b)(1), provides that although a qualified pension or profit-sharing plan may provide for incidental death (or life insurance) benefits, such a plan must be established and maintained primarily for the purpose of providing retirement benefits or deferred compensation.

[2] However, pursuant to section 408A(a) and (c)(5), the minimum required distribution rules of section 401(a)(9) apply to a Roth IRA only after the death of the IRA owner.

forth in §§ 1.401(a)(9)–1 through 8. In the case of a defined contribution plan, § 1.401(a)(9)–5 provides generally that an individual's required minimum distribution for a distribution calendar year is determined by dividing the individual's account balance determined under § 1.401(a)(9)–5, Q&A–3, by the applicable distribution period. Under § 1.401(a)(9)–5, Q&A–1(b), a distribution calendar year is a calendar year for which a minimum distribution is required. For example, if a 5-percent owner participating in a qualified plan attained age 70½ during August of 2018 (so that the required beginning date was April 1, 2019), then the first distribution calendar year was 2018, and the required minimum distribution for that year was based on the applicable distribution period for a 70-year-old individual for 2018 (even though it could have been paid at any time from January 1, 2018 through April 1, 2019).

Pursuant to § 1.401(a)(9)–5, Q&A–4(a), for required minimum distributions during the employee's lifetime (including the year in which the employee dies), the applicable distribution period for an employee is the distribution period for the employee's age under the Uniform Lifetime Table (which is equal to the joint and last survivor life expectancy for the employee and a hypothetical beneficiary 10 years younger). However, pursuant to § 1.401(a)(9)–5, Q&A–4(b), if an employee's sole beneficiary is the employee's surviving spouse and the spouse is more than 10 years younger than the employee, then the applicable distribution period is the joint and last survivor life expectancy of the employee and spouse under the Joint and Last Survivor Table (which is longer than the distribution period that would apply for the employee under the Uniform Lifetime Table).

Pursuant to § 1.401(a)(9)–5, Q&A–5, for distribution calendar years after the calendar year of the employee's death, the applicable distribution period generally is the remaining life expectancy of the designated beneficiary, subject to certain exceptions. Two of these exceptions, which apply if the employee dies after the required beginning date, substitute the employee's remaining life expectancy for the beneficiary's remaining life expectancy. These two exceptions apply to an employee who does not have a designated beneficiary or is younger than the designated beneficiary.[3] Section 1.401(a)(9)–5,

Q&A–5(c)(1) provides that the remaining life expectancy of the designated beneficiary is calculated as the life expectancy under the Single Life Table for the designated beneficiary's age in the calendar year following the calendar year of the employee's death, reduced by 1 for each subsequent year. However, if one of the two exceptions applies (so that the relevant life expectancy is the remaining life expectancy of the employee), then, pursuant to § 1.401(a)(9)–5, Q&A–5(c)(3), the remaining life expectancy of the employee is calculated as the life expectancy under the Single Life Table for the employee's age in the calendar year of the employee's death, reduced by 1 for each subsequent year.

A special rule applies to determine the designated beneficiary's remaining life expectancy if the employee's surviving spouse is the employee's sole beneficiary. In that case, pursuant to § 1.401(a)(9)–5, Q&A–5(c)(2), the designated beneficiary's remaining life expectancy is recalculated each calendar year as the life expectancy under the Single Life Table for the designated beneficiary's age in that year. For calendar years after the year of the spouse's death, the distribution period that applies for the spouse's beneficiary is the spouse's remaining life expectancy from the Single Life Table for the spouse's age for the calendar year of the spouse's death, reduced by 1 for each subsequent year.

Consistent with the policy of section 401(a)(9) to limit deferral of retirement income, § 1.401(a)(9)–6, Q&A–1(a) provides that, except as otherwise provided in § 1.401(a)(9)–6, payments from a defined benefit plan must be non-increasing in order to satisfy section 401(a)(9).[4] Section 1.401(a)(9)–6, Q&A–14(c) provides that, in the case of annuity payments paid from an annuity contract purchased from an insurance company, certain types of increasing payments will not cause an annuity payment stream to fail to satisfy this non-increasing payment requirement. These exceptions apply only if the total future expected payments under the annuity contract (determined in accordance with § 1.401(a)(9)–6, Q&A–14(e)(3)) exceed the total value being annuitized (determined in accordance with § 1.401(a)(9)–6, Q&A–14(e)(1)).

Section 1.401(a)(9)–9 provides life expectancy and distribution period

tables that are used to apply the rules of § 1.401(a)(9)–5 and to make the calculations in § 1.401(a)(9)–6, Q&A–14. Section 1.401(a)(9)–9 was issued in 2002 (67 FR 18988), and the tables in that section were developed using mortality rates for 2003. These mortality rates were derived by applying mortality improvement through 2003 to the mortality rates from the Annuity 2000 Basic Table (which was the most recent individual annuity mortality table available in 2002).[5] The rates of mortality improvement used for this purpose were the ones that were used in developing that mortality table. The resulting separate mortality rates for males and females were blended using a fixed 50 percent male/50 percent female blend.

Section 72(t) imposes an additional income tax on early distributions from qualified retirement plans (including plans qualified under section 401(a) or section 403(a), annuity contracts and other arrangements described in section 403(b), and individual retirement arrangements described in section 408(a) or section 408(b)). However, section 72(t)(2)(A)(iv) provides an exception for a series of substantially equal periodic payments made for the life (or life expectancy) of the employee or the joint lives (or joint life expectancies) of the employee and the designated beneficiary. Revenue Ruling 2002–62, 2002–2 C.B. 710, provides that the life expectancy tables set forth in § 1.401(a)(9)–9 may be used for purposes of determining payments that satisfy the exception under section 72(t)(2)(A)(iv). Rev. Rul. 2002–62 also provides a fixed annuitization method of determining payments that satisfy this exception. Under the fixed annuitization method, the annual payment for each year (which is determined only for the first year and not reset for subsequent years) is determined by dividing the account balance by an annuity factor that is the present value of an annuity of $1 per year beginning at the taxpayer's age and continuing for the life of the taxpayer (or the joint lives of the taxpayer and his or her beneficiary). The annuity factor is derived using the mortality table used to develop the life expectancy tables set forth in § 1.401(a)(9)–9.

Executive Order 13847, 83 FR 45321, which was signed on August 31, 2018, directs the Secretary of the Treasury to examine the life expectancy and distribution period tables in the regulations on required minimum

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[3] Another exception applies if the employee dies before the required beginning date and has no designated beneficiary. In that case, the employee's

entire interest must be distributed by the end of the calendar year that includes the fifth anniversary of the date of the employee's death.

[4] Pursuant to § 1.401(a)(9)–8, Q&A–2(a)(3), the rules of § 1.401(a)(9)–6 also apply to an annuity contract purchased under a defined contribution plan.

[5] The Annuity 2000 Basic Table was developed by projecting mortality rates from the 1983 Individual Annuity Mortality Basic Table.

distributions from retirement plans and determine whether they should be updated to reflect current mortality data and whether such updates should be made annually or on another periodic basis. The purpose of any such updates would be to increase the effectiveness of tax-favored retirement programs by allowing retirees to retain sufficient retirement savings in these programs for their later years.

Explanation of Provisions

I. Overview

In accordance with Executive Order 13847, the Department of the Treasury (Treasury Department) and the IRS have examined the life expectancy and distribution period tables in § 1.401(a)(9)–9, and have reviewed currently available mortality data. As a result of this review, the Treasury Department and the IRS have determined that those tables should be updated to reflect current life expectancies. Accordingly, these proposed regulations would update those tables.

The life expectancy tables and applicable distribution period tables in the proposed regulations reflect longer life expectancies than the tables in the existing regulations. For example, a 70-year old IRA owner who uses the Uniform Lifetime Table to calculate required minimum distributions must use a life expectancy of 27.4 years under the existing regulations. Using the Uniform Lifetime Table set forth in the proposed regulations, this IRA owner would use a life expectancy of 29.1 years to calculate required minimum distributions. As another example, under the existing regulations, a 75-year old surviving spouse who is the employee's sole beneficiary and uses the Single Life Table to compute required minimum distributions must use a life expectancy of 13.4 years. Under the proposed regulations, the spouse would use a life expectancy of 14.8 years. The effect of these changes is to reduce required minimum distributions, which will allow participants to retain larger amounts in their retirement plans to account for the possibility they may live longer.

II. Updated Life Expectancy and Distribution Period Tables

The life expectancy and distribution period tables in the proposed regulations have been developed based on mortality rates for 2021. These mortality rates were derived by applying mortality improvement through 2021 to the mortality rates from the experience tables used to develop the 2012

Individual Annuity Mortality tables (which are the most recent individual annuity mortality tables).[6] The separate mortality rates for males and females in these experience tables, which were based on the Payout Annuity Mortality Experience Study (which covered the period 2000 to 2004), have been projected from the central year of 2002 using the respective mortality improvement rates from the Mortality Improvement Scale MP–2018 for males and females.[7] The mortality table in the proposed regulations was developed by blending the resulting separate mortality rates for males and females using a fixed 50 percent male/50 percent female blend.

The Single Life Table in the proposed regulations sets forth life expectancies for each age, with the life expectancy for an age calculated as the sum of the probabilities of an individual at that age surviving to each future year. The resulting life expectancy is then increased by $11/24$ [8] to approximate the effect of monthly payments, and is subject to a floor of 1.0.

The Uniform Lifetime Table in the proposed regulations sets forth joint and last survivor life expectancies for each age beginning with age 70, based on a hypothetical beneficiary. Pursuant to § 1.401(a)(9)–5, Q&A–4(a), the Uniform Lifetime Table is used for determining the distribution period for lifetime distributions to an employee in situations in which the employee's surviving spouse either is not the sole designated beneficiary or is the sole designated beneficiary but is not more than 10 years younger than the employee. As under the existing regulations, the joint and last survivor life expectancy of an employee is taken from the Joint and Last Survivor Table using a hypothetical beneficiary who is assumed to be 10 years younger than the employee.

The Joint and Last Survivor Table sets forth joint and last survivor life expectancies of an employee and the employee's beneficiary for each combination of ages of those individuals. The joint and last survivor life expectancy for an employee and a beneficiary at a combination of ages is

calculated as the sum of the probabilities of the employee surviving to each future year, plus the sum of the probabilities of the beneficiary surviving to each future year, minus the sum of the probabilities of both the employee and beneficiary surviving to each future year. The resulting joint and last survivor life expectancy is then increased by $11/24$ to approximate the effect of monthly payments, and is subject to a floor of 1.0.

The life expectancy tables in the current regulations are used in several examples in § 1.401(a)(9)–6, Q&A–14(f) that illustrate the availability of the exception described in § 1.401(a)(9)–6, Q&A–14(c) (regarding certain increasing payments under insurance company annuity contracts). These proposed regulations do not include revisions to these examples to reflect the life expectancy tables in the proposed regulations.

III. Effective/Applicability Date

The life expectancy tables and Uniform Lifetime Table under these proposed regulations would apply for distribution calendar years beginning on or after January 1, 2021. Thus, for example, for an individual who attains age 70½ during 2020 (so that the minimum required distribution for the distribution calendar year 2020 is due April 1, 2021), the final regulations would not apply to the minimum required distribution for the individual's 2020 distribution calendar year (which is due April 1, 2021), but would apply to the minimum required distribution for the individual's 2021 distribution calendar year (which is due December 31, 2021).

These proposed regulations include a transition rule that applies if an employee died before January 1, 2021, and, under the rules of § 1.401(a)(9)–5, Q&A–5, the distribution period that applies for calendar years following the calendar year of the employee's death is equal to a single life expectancy calculated as of the calendar year of the employee's death (or if applicable, the year after the employee's death), reduced by 1 for each subsequent year. Under this transition rule, the initial life expectancy used to determine the distribution period is reset by using the new Single Life Table for the age of the relevant individual in the calendar year for which life expectancy was set under § 1.401(a)(9)–5, Q&A 5(c). For distribution calendar years beginning on or after January 1, 2021, the distribution period is determined by reducing that initial life expectancy by 1 for each year subsequent to the year for which it was initially set.

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[6] The experience tables and the 2012 Individual Annuity Mortality tables can be found at *https://www.actuary.org/sites/default/files/files/publications/Payout_Annuity_Report_09-28-11.pdf*.

[7] The Mortality Improvement Scale MP–2018 can be found at *https://www.soa.org/experience-studies/2018/mortality-improvement-scale-mp-2018/*.

[8] Assuming an equal distribution of deaths throughout the year, if a retiree is scheduled to receive monthly payments on the last day of each month then, in the year of death, on average, the retiree would receive $11/24$th of a full year's worth of payments.

This transition rule applies in three situations: (1) The employee died before the required beginning date with a non-spousal designated beneficiary (so that the applicable distribution period is determined based on the remaining life expectancy of the designated beneficiary for the calendar year following the calendar year of the employee's death); (2) the employee died after the required beginning date without a designated beneficiary (so that the applicable distribution period is determined based on the remaining life expectancy of the employee for the year of the employee's death); and (3) the employee, who is younger than the designated beneficiary, died after the required beginning date (so that the applicable distribution period is determined based on the remaining life expectancy of the employee for the year of the employee's death).

The proposed regulations illustrate the application of this transition rule with an example involving an employee who died at age 80 in 2018 with a designated beneficiary (who was not the employee's spouse) who was age 75 in the year of the employee's death. For 2019, the distribution period that applies for the beneficiary is 12.7 years (the period applicable for a 76 year old under the Single Life Table in current § 1.401(a)(9)–9), and for 2020, it is 11.7 years (the original distribution period, reduced by 1 year). For 2021, taking into account the life expectancy tables under the proposed regulations and applying the transition rule, the applicable distribution period would be 12.0 years (the 14.0 year life expectancy for a 76 year old under the Single Life Table in the proposed regulations, reduced by 2 years).

A similar transition rule applies if an employee's sole beneficiary is the employee's surviving spouse and the spouse died before January 1, 2021. Under the rules of § 1.401(a)(9)–5, Q&A–5(c)(2), the distribution period that applies for the spouse's beneficiary is equal to the single life expectancy for the spouse calculated for the calendar year of the spouse's death, reduced by 1 for each subsequent year. Under the transition rule, the initial life expectancy used to determine the distribution period is reset by using the new Single Life Table for the age of the spouse in the calendar year of the spouse's death. For distribution calendar years beginning on or after January 1, 2021, the distribution period is determined by reducing that initial life expectancy by 1 for each year subsequent to the year for which it was initially set.

These transition rules, under which there is a one-time reset for the relevant life expectancy using the Single Life Table under the proposed regulations, are designed to recognize that the general population has longer life expectancies than the life expectancies set forth in the 2002 regulations. However, because the reset life expectancy is based on the age for which life expectancy was originally determined (rather than the relevant individual's current age), it is consistent with Congressional intent to limit recalculation of life expectancy to the employee and the employee's spouse.

IV. Applicability to Revenue Ruling 2002–62

After final regulations that provide updated life expectancy and distribution period tables under section 401(a)(9) are issued, if a taxpayer commenced receiving substantially equal periodic payments before January 1, 2021, using the required minimum distribution method described in section 2.01(a) of Rev. Rul. 2002–62, then the application of the final regulations will not be treated as a modification to a series of substantially equal periodic payments as described in section 72(t)(4)(A)(ii). In addition, if a taxpayer commences receiving substantially equal periodic payments on or after January 1, 2021, and uses either the fixed amortization method described in section 2.01(b) of Rev. Rul. 2002–62 or the fixed annuitization method described in section 2.01(c) of Rev. Rul. 2002–62, then the method should be applied by applying the corresponding life expectancy, distribution period, and mortality tables in the final regulations in lieu of the tables in formerly applicable § 1.401(a)(9)–9 that are referenced in Rev. Rul. 2002–62.

Special Analyses

I. Regulatory Impact Analysis

Executive Orders 13771, 13563, and 12866 direct agencies to assess costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits, including potential economic, environmental, public health and safety effects, distributive impacts, and equity. Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, reducing costs, harmonizing rules, and promoting flexibility. The Executive Order 13771 designation for any final rule resulting from the proposed regulation will be informed by comments received. The preliminary Executive Order 13771 designation for this proposed rule is deregulatory.

The proposed regulations have been designated by the Office of Management and Budget's (OMB's) Office of Information and Regulatory Affairs (OIRA) as subject to review under Executive Order 12866 pursuant to the Memorandum of Agreement (MOA, April 11, 2018) between the Treasury Department and the Office of Management and Budget regarding review of tax regulations. OIRA has determined that the proposed rulemaking is significant and subject to review under Executive Order 12866 and section 1(b) of the Memorandum of Agreement. Accordingly, the proposed regulations have been reviewed by OMB.

1. Introduction and Need for Regulation

As stated earlier in the preamble to the proposed regulations, in accordance with Executive Order 13847, the Treasury Department and the IRS have examined the life expectancy and distribution period tables in § 1.401(a)(9)–9 and have reviewed currently available mortality data. As a result of this review, the Treasury Department and the IRS determined that those tables should be updated to reflect current life expectancies.

The life expectancy tables and applicable distribution period tables in the proposed regulations reflect longer life expectancies than the tables in the existing regulations. The effect of these changes is to reduce annual required minimum distributions (RMDs) from qualified defined contribution plans, IRAs, and certain other tax-favored retirement plans (referred to as affected retirement plans). The purpose of such updates is to increase the effectiveness of these tax-favored retirement programs by allowing retirees to retain more retirement savings in these programs for their later years.

Pursuant to section 6(a)(3)(B) of Executive Order 12866, the following qualitative analysis provides further details regarding the anticipated impacts of the proposed regulations. After briefly describing the proposed regulations in Part 2, the baseline used for the analysis is described in Part 3. Part 4 describes the entities and individuals affected by the proposed regulations. Part 5 provides a qualitative assessment of the potential economic effects, including benefits and costs, of the proposed regulations compared to the baseline.

2. The Proposed Regulations

The RMD rules require an individual to withdraw assets from an affected retirement plan as generally taxable distributions over the life expectancy of the individual (or the individual and spouse).[9] Balances remaining at the death of the individual that are paid to a spouse as designated beneficiary must generally be withdrawn over the life expectancy of the spouse.[10] The purpose of the RMD rules is to ensure that the favorable tax treatment afforded a qualified plan is used primarily to provide retirement income to a participant and designated beneficiary, while mitigating the cost to the government of deferred taxation on savings in qualified retirement plans.

The life expectancy tables and applicable distribution period tables in the proposed regulations reflect longer life expectancies than the tables in the existing regulations that are generally between one and two years longer than under the existing regulations. This will give individuals with affected retirement plans the option to withdraw slightly smaller amounts from their plans each year, giving individuals and beneficiaries the option to leave amounts in tax-favored retirement accounts for a slightly longer period of time, to account for the possibility that they may live longer.

3. Baseline

The Treasury Department and the IRS have assessed the benefits and costs of these proposed regulations relative to a no-action baseline reflecting anticipated Federal income tax-related behavior in the absence of these proposed regulations.

4. Affected Entities and Individuals

The proposed regulations affect individuals who withdraw exactly the RMD amount from their affected retirement plan but who would prefer to withdraw less in the absence of the minimum distribution requirements. Individuals who withdraw more than the current RMD are not bound by the current rules and therefore are not expected to reduce withdrawals as a result of the proposed regulations. Using confidential tax return data, the Treasury Department estimates roughly 4.6 million individuals, or 20.5% of all individuals required to take RMDs from an affected retirement plan, will make withdrawals at the minimum required level in 2021, and might reduce withdrawals as a result of the rule.

In addition, Individual Retirement Account (IRA) providers would have to change the administration of their IRAs to reflect the new life expectancy tables. The Treasury Department does not have an estimate of the number of such entities. Additionally, employer plans that do not require benefits to be paid out as a lump sum would have to change the administration of their plans to reflect the new life expectancy tables. The Treasury Department expects that this would include most large plans, which typically do not require benefits to be paid out in a lump sum and thus would be affected by the proposed regulations. The latest available data, the Private Pension Bulletin produced by the Department of Labor, indicate there were 81,469 large qualified pension plans (defined as plans with more than 100 participants) in 2016.[11]

5. Economic Effects

a. Labor Supply Effect

The proposed rule produces a positive wealth effect, as lower levels of RMDs lead to larger amounts of assets earning tax-deferred returns. While this might plausibly lead to a reduction in labor supply, this effect is likely to be small for the following reasons.

First, the proposed regulations would lead to a small decrease in the portion of assets in affected retirement plans that must be withdrawn as an RMD for a 70-year old retiree. Under the current regulations, if a 70-year old retiree had $250,000 in his or her affected retirement plan, the individual is required at age 70 to withdraw $9,124, equal to 3.65% of plan assets. Under the proposed regulations, the individual would be required to withdraw $8,591, equal to 3.44% of plan assets, a decrease of $533 or 0.21% of plan assets. Under the current regulations, a 90-year old retiree with $250,000 in his or her affected retirement plan would be required at age 90 to withdraw $21,930, equal to 8.77% of plan assets. Under the proposed regulations, the individual would be required to withdraw $20,661, equal to 8.26% of plan assets, a decrease of $1,269 or 0.51% of plan assets.

Second, the proposed regulations are expected to affect the labor supply decisions only of individuals who are making withdrawals at or very close to the RMD level. Individuals making withdrawals from affected retirement plans exceeding the current RMD are not bound by the current minimum and are therefore not affected by relaxing the minimum by a small amount. Hence, their labor supply decisions are unlikely to change based on the proposed regulations. Thus, the proposed regulations would likely affect only a very small portion of high income individuals working into their late 60s and early 70s.

The small impact of the proposed regulations is illustrated by an example. Assume the following facts. The individual is unmarried and has $250,000 in his or her IRA and $0 in a taxable account. The individual turns age 70 on January 1 and because the individual turns 70½ in the year must begin taking RMDs. The RMD amount is determined as of January 1, but is withdrawn on December 31 of the year in question. Tax is paid immediately upon the withdrawal of the RMD. Because the individual who is bound by the RMD rules has revealed a preference to continue to save the funds rather than consume them, the amount remaining after the tax has been paid on the distribution is placed into a taxable investment account on January 1 of the following year (the day after the RMD is made). Assets held in the IRA and the taxable account earn a 3% rate of return once the individual turns age 70. The RMDs and the returns in the taxable account are taxed at a marginal rate of 22%.

Under the mortality rates in the proposed regulations, an individual who is 70 is expected to live until approximately age 90. We examine the total assets, *i.e.*, the sum of the assets in the IRA and in the taxable account, that the taxpayer would have at age 90 if the individual only takes RMDs each year. Under the current regulations, the individual's total assets at age 90 would be $371,004. Under the proposed regulations, the individual's total assets at age 90 would be $374,461. This $3,457 (less than 1%) increase in total assets at age 90 is unlikely to allow or incentivize the individual to retire earlier than he or she otherwise would.

The proposed regulations could in theory lead to an increase in labor supply. The argument is that because the value of contributing to a retirement fund has increased, the return to working longer has increased. Another example illustrates that the additional return to working is small and very unlikely to induce an increase in labor supply.

Assume the following facts. The individual is unmarried and is age 69.

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[9] This requirement to take distributions during the individual's lifetime does not apply to a Roth IRA described in section 408A.

[10] Balances payable to other designated beneficiaries must generally be withdrawn according to the beneficiary's life expectancy (fixed as of the year of death). Different rules apply if the individual dies prior to the required beginning date for RMDs.

[11] *https://www.dol.gov/sites/default/files/ebsa/ researchers/statistics/retirement-bulletins/private-pension-plan-bulletin-historical-tables-and-graphs.pdf.*

The individual chooses whether to work an additional year or to retire. If the individual works an additional year, the individual's income is sufficiently large so that the individual would choose to contribute the maximum amount to an IRA ($7,000 in 2019). If the individual retires, the individual does not contribute to an IRA. That is, if the individual retires at age 69, the individual will have $250,000 of assets in his or her IRA and $0 in a taxable account on January 1 in the year the individual turns age 70. If the individual retires at age 70, the individual will have $257,000 of assets in his or her IRA and $0 in a taxable account on January 1 in the year the individual turns age 70.

As in the previous example, the individual has RMDs beginning at age 70½. The RMD amount is determined on January 1 but is withdrawn on December 31 of the year in question. Tax is paid immediately upon the withdrawal of the RMD amount. The amount remaining after the tax has been paid on the distribution is placed on January 1 of the following year, *i.e.,* the day after the RMD was made, into a taxable investment account. Assets held in the IRA and the taxable account earn a 3% rate of return once the individual turns age 70. The RMDs and the returns in the taxable account are taxed at a marginal tax rate of 22%.

We again examine the total assets, *i.e.,* the sum of the assets in the IRA and in the taxable account that the individual would have at age 90. If the individual waits to retire at age 70, under the current RMD rules, the individual's total assets at age 90 would be $10,388 more than if the taxpayer retired at age 69. Under the proposed rulemaking, if the individual waits to retire at age 70, the individual's total assets at age 90 would be $10,485 more than if the individual retired at age 69.

The proposed rulemaking, therefore, increases the difference in total assets at age 90 by $97. Even if the individual contributed the $25,000 maximum to a 401(k) plan—$19,000 plus $6,000 in catch-up contributions in 2019—the proposed rulemaking would increase the difference in total assets at age 90 by only $346. These amounts are likely much too small to affect the individual's decision about whether to retire at age 69 or wait to retire at age 70.

Under the standard assumption that leisure is a normal good, *i.e.,* time spent not working increases as income and wealth increase, the increase in potential retirement income generated by the proposed rulemaking could lead some individuals to work less. However, given the magnitude of the change as suggested in the preceding example, this behavior is unlikely.

b. Increased Fees

Under the proposed regulations, more assets will be left in affected retirement plans. Using confidential tax data, the Treasury Department estimates that in 2021, the proposed regulations would lead to an $8.1 billion reduction in distributions from affected retirement plans. A joint study by Brightscope and the Investment Company Institute indicates that "all-in" fees for large plans, which are the ones most likely not to require distributions to be taken as a lump sum, are typically below 1%.[12] Thus, reduced withdrawals could lead to an increase in fees of about $81 million earned by providers of services to affected retirement plans in 2021. However, in the absence of the proposed regulations, individuals who prefer to make smaller withdrawals would likely transfer these funds into taxable investment accounts, which carry their own fees. As a result, the net additional fees earned by the investment industry as a result of the proposed regulations are expected to be much less than $81 million.

c. Administrative Costs

Under the proposed regulations, all IRA providers and administrators of employer-sponsored retirement plans that allow non-lump sum distributions will need to update their life expectancy and distribution period tables and communicate the changes in their RMDs to their plan participants. However, most employers use purchased software of third-party service providers that provide plan administrative services for many employers. This creates economies of scale and reduces the total cost of the required update. The total cost will then be spread over many employers, such that the cost to each employer is expected to be very low. The Treasury Department and the IRS do not have sufficient data to determine the increased administrative costs of the

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[12] See "The Brightscope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans" (December 2014) at *https://www.ici.org/pdf/ppr_14_ dcplan_profile_401k.pdf.* This study points to page 7 of "Inside the Structure of Defined Contribution/ 401(k) Plan Fees, 2013: A study assessing the mechanics of the 'all-in' fee" (August 2014) at *https://www.ici.org/pdf/rpt_14_dc_401k_fee_ study.pdf,* for a definition of the 'all-in fee.' This definition of 'all-in fee' ". . . includes all administrative or recordkeeping fees as well as investment fees (*i.e.,* the investment option's total expense ratio) whether they are assessed at the plan, employer or participant level. The 'all-in' fee excludes those recordkeeping and administrative activity fees that only apply to particular participants who engage in the activity (*e.g.,* self-directed brokerage, managed accounts, loans, QDROs and distributions)."

proposed regulations for an individual IRA provider, plan administrator who uses in-house software, plan service provider or software developer, and invite comments on the cost of implementing the life expectancy and distribution period table in the proposed regulations for these entities. The Treasury Department and the IRS also invite comments on the number of such entities who would have to implement changes to software in order to implement the life expectancy and distribution period table in the proposed regulations.

II. Regulatory Flexibility Act

It is hereby certified pursuant to the Regulatory Flexibility Act *5 U.S.C., chapter 6) that these proposed regulations will not have a significant economic impact on a substantial number of small entities. These proposed regulations will apply to all employers that sponsor defined contribution plans regardless of size. Although data are not available to estimate the number of small entitles affected, the proposed rule may affect a substantial number. As stated above, this rule updates life expectancies that are required to be used by statute.

Although the proposed rule may affect a substantial number of small entities, the economic impact of the proposed regulations is not likely to be significant. Small businesses generally comply with the minimum required distribution rules using either third-party administrators or software, creating economies of scale that mitigate the cost of updating life expectancy tables. Such software is updated periodically irrespective of a change in life expectancies used to determine minimum required distributions. The portion of the cost of a periodic update that is attributable to the implementation of the life expectancy and distribution period tables in the proposed regulations will be spread over the client base of a service provider that uses software developed in-house, and over the group of purchasers of generally-available plan administration software. Because, in either case, the cost of changing software to implement the updated life expectancies is spread over a large group of businesses that maintain retirement plans, it is estimated that the incremental cost for each affected small businesses as a result of the use of updated life expectancies is not significant.

Notwithstanding this certification, Treasury and the IRS invite comments about the impact that the proposed rule would have on small entities. Pursuant to section 7805(f) of the Code, this

notice of proposed rulemaking will be submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on its impact on small entities.

Comments and Public Hearing

Before these proposed regulations are adopted as final regulations, consideration will be given to any comments that are submitted timely to the Treasury Department and the IRS as prescribed in this preamble in the **ADDRESSES** section. The Treasury Department and the IRS request comments on all aspects of these proposed regulations, including:

• How often the life expectancy and distribution period tables in these regulations should be updated.

• The extent of the administrative burden involved in implementing any such updates.

• Whether guidance is needed so that a participant whose plan administrator or trustee fails to implement the final regulations in a timely fashion may take required minimum distributions (or roll over distributions in excess of the required minimum distribution) in a manner that takes into account the final regulations.

All comments will be available for public inspection and copying at *www.regulations.gov* or upon request.

A public hearing on these proposed regulations has been scheduled for January 23, 2020, beginning at 10 a.m. in the IRS Auditorium, Internal Revenue Service, 1111 Constitution Avenue NW, Washington, DC 20224. Due to building security procedures, visitors must enter at the Constitution Avenue entrance. In addition, all visitors must present photo identification to enter the building. Because of access restrictions, visitors will not be admitted beyond the immediate entrance area more than 30 minutes before the hearing starts. For information about having your name placed on the building access list to attend the hearing, see the **FOR FURTHER INFORMATION CONTACT** section of this preamble.

The rules of 26 CFR 601.601(a)(3) apply to the hearing. Persons who wish to present oral comments at the hearing must submit written or electronic comments by January 7, 2020, and an outline of topics to be discussed and the amount of time to be devoted to each topic by January 7, 2020. A period of 10 minutes will be allotted to each person for making comments. An agenda showing the scheduling of the speakers will be prepared after the deadline for receiving outlines has passed. Copies of the agenda will be available free of charge at the hearing.

Drafting Information

The principal authors of these proposed regulations are Arslan Malik and Linda S.F. Marshall, of the Office of the Associate Chief Counsel (Employee Benefits, Exempt Organizations, and Employment Taxes). However, other personnel from the Treasury Department and the IRS participated in the development of the proposed regulations.

List of Subjects in 26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

Proposed Amendments to the Regulations

Accordingly, 26 CFR part 1 is proposed to be amended as follows:

PART 1—INCOME TAX

■ **Paragraph 1.** The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

§ 1.401(a)(9)–5 [Amended]

■ **Par. 2.** Section 1.401(a)(9)–5 is amended by:
■ 1. Removing the language ''A–1 of § 1.401(a)(9)–9'' wherever it appears and adding ''§ 1.401(a)(9)–9(b)'' in its place.
■ 2. Removing the language ''A–2 of § 1.401(a)(9)–9'' wherever it appears and adding ''§ 1.401(a)(9)–9(c)'' in its place.
■ 3. Removing the language ''A–3 of § 1.401(a)(9)–9'' wherever it appears and adding ''§ 1.401(a)(9)–9(d)'' in its place.

§ 1.401(a)(9)–6 [Amended]

■ **Par. 3.** Section 1.401(a)(9)–6 is amended by:
■ 1. Removing the language ''A–1 of § 1.401(a)(9)–9'' wherever it appears and adding ''§ 1.401(a)(9)–9(b)'' in its place.
■ 2. Removing the language ''A–2 of § 1.401(a)(9)–9'' wherever it appears and adding ''§ 1.401(a)(9)–9(d)'' in its place.
■ 3. Removing the language ''A–3 of § 1.401(a)(9)–9'' wherever it appears and adding ''§ 1.401(a)(9)–9(e)'' in its place.

§ 1.401(a)(9)–8 [Amended]

■ **Par. 4.** Section 1.401(a)(9)–8 is amended by removing the language ''A–2 of § 1.401(a)(9)–9'' wherever it appears and adding ''§ 1.401(a)(9)–9(d)'' in its place.
■ **Par. 5.** Section 1.401(a)(9)–9 is amended to read as follows:

Section 1.401(a)(9)–9 Life Expectancy and Distribution Period Tables

(a) *In general.* This section specifies the life expectancy and applicable distribution period tables that apply for purposes of determining required

minimum distributions under section 401(a)(9). Paragraphs (b), (c), and (d) of this section set forth these tables. Paragraph (e) of this section provides the mortality rates that are used to develop these tables. Paragraph (f) of this section provides applicability date rules.

(b) *Single Life Table.* Table 1 to paragraph (b), referred to as the Single Life Table, sets forth the life expectancy of an individual at each age.

TABLE 1 TO PARAGRAPH (b)—SINGLE LIFE TABLE

Age	Life expectancy
0	84.5
1	83.7
2	82.7
3	81.7
4	80.8
5	79.8
6	78.8
7	77.8
8	76.8
9	75.8
10	74.8
11	73.8
12	72.8
13	71.9
14	70.9
15	69.9
16	68.9
17	67.9
18	66.9
19	66.0
20	65.0
21	64.0
22	63.0
23	62.0
24	61.1
25	60.1
26	59.1
27	58.2
28	57.2
29	56.2
30	55.3
31	54.3
32	53.4
33	52.4
34	51.4
35	50.5
36	49.5
37	48.6
38	47.6
39	46.6
40	45.7
41	44.7
42	43.8
43	42.8
44	41.8
45	40.9
46	39.9
47	39.0
48	38.0
49	37.1
50	36.1
51	35.2
52	34.3
53	33.3
54	32.4
55	31.5

TABLE 1 TO PARAGRAPH (b)—SINGLE LIFE TABLE—Continued	
Age	Life expectancy
56	30.6
57	29.7
58	28.8
59	27.9
60	27.1
61	26.2
62	25.3
63	24.5
64	23.6
65	22.8
66	22.0
67	21.2
68	20.4
69	19.5
70	18.7
71	17.9
72	17.1
73	16.3
74	15.6
75	14.8
76	14.0
77	13.3
78	12.6
79	11.9
80	11.2
81	10.5
82	9.9
83	9.2
84	8.6
85	8.1
86	7.5
87	7.0
88	6.6
89	6.1
90	5.7
91	5.3
92	4.9
93	4.6
94	4.2
95	3.9
96	3.7
97	3.4
98	3.2
99	3.0
100	2.8
101	2.6
102	2.5
103	2.3
104	2.2

TABLE 1 TO PARAGRAPH (b)—SINGLE LIFE TABLE—Continued	
Age	Life expectancy
105	2.1
106	2.1
107	2.1
108	2.0
109	2.0
110	2.0
111	2.0
112	2.0
113	1.9
114	1.9
115	1.8
116	1.8
117	1.6
118	1.4
119	1.1
120 +	1.0

(c) *Uniform Lifetime Table.* Table 2 to paragraph (c), referred to as the Uniform Lifetime Table, sets forth the distribution period that applies for lifetime distributions to an employee in situations in which the employee's surviving spouse is not the sole designated beneficiary. This table is also used if the employee's surviving spouse is the sole designated beneficiary but is not more than 10 years younger than the employee.

TABLE 2 TO PARAGRAPH (c)—UNIFORM LIFETIME TABLE	
Age of employee	Distribution period
70	29.1
71	28.2
72	27.3
73	26.4
74	25.5
75	24.6
76	23.7
77	22.8
78	21.9
79	21.0
80	20.2

TABLE 2 TO PARAGRAPH (c)—UNIFORM LIFETIME TABLE—Continued	
Age of employee	Distribution period
81	19.3
82	18.4
83	17.6
84	16.8
85	16.0
86	15.2
87	14.4
88	13.6
89	12.9
90	12.1
91	11.4
92	10.8
93	10.1
94	9.5
95	8.9
96	8.3
97	7.8
98	7.3
99	6.8
100	6.4
101	5.9
102	5.6
103	5.2
104	4.9
105	4.6
106	4.3
107	4.1
108	3.9
109	3.7
110	3.5
111	3.4
112	3.2
113	3.1
114	3.0
115	2.9
116	2.8
117	2.7
118	2.5
119	2.3
120 +	2.0

(d) *Joint and Last Survivor Table.* Table 3 to paragraph (d), referred to as the Joint and Last Survivor Table, is used for determining the joint and last survivor life expectancy of two individuals.

TABLE 3 TO PARAGRAPH (d)—JOINT AND LAST SURVIVOR TABLE									
Ages	0	1	2	3	4	5	6	7	8
0	91.8	91.4	90.9	90.5	90.1	89.7	89.3	89.0	88.7
1	91.4	90.9	90.4	89.9	89.5	89.1	88.7	88.3	88.0
2	90.9	90.4	89.9	89.4	88.9	88.5	88.1	87.7	87.3
3	90.5	89.9	89.4	88.9	88.4	87.9	87.5	87.1	86.7
4	90.1	89.5	88.9	88.4	87.9	87.4	86.9	86.5	86.1
5	89.7	89.1	88.5	87.9	87.4	86.9	86.4	85.9	85.5
6	89.3	88.7	88.1	87.5	86.9	86.4	85.9	85.4	84.9
7	89.0	88.3	87.7	87.1	86.5	85.9	85.4	84.9	84.4
8	88.7	88.0	87.3	86.7	86.1	85.5	84.9	84.4	83.9
9	88.4	87.7	87.0	86.3	85.7	85.1	84.5	83.9	83.4
10	88.1	87.4	86.7	86.0	85.3	84.7	84.1	83.5	82.9
11	87.9	87.1	86.4	85.7	85.0	84.4	83.7	83.1	82.5
12	87.6	86.9	86.1	85.4	84.7	84.0	83.4	82.7	82.1
13	87.4	86.7	85.9	85.1	84.4	83.7	83.0	82.4	81.7
14	87.2	86.4	85.7	84.9	84.2	83.4	82.7	82.0	81.4
15	87.0	86.2	85.5	84.7	83.9	83.2	82.4	81.7	81.0

TABLE 3 TO PARAGRAPH (d)—JOINT AND LAST SURVIVOR TABLE—Continued

Ages	0	1	2	3	4	5	6	7	8
16	86.9	86.1	85.3	84.5	83.7	82.9	82.2	81.4	80.7
17	86.7	85.9	85.1	84.3	83.5	82.7	81.9	81.2	80.4
18	86.6	85.7	84.9	84.1	83.3	82.5	81.7	80.9	80.2
19	86.4	85.6	84.7	83.9	83.1	82.3	81.5	80.7	79.9
20	86.3	85.5	84.6	83.8	82.9	82.1	81.3	80.5	79.7
21	86.2	85.3	84.5	83.6	82.8	81.9	81.1	80.3	79.5
22	86.1	85.2	84.3	83.5	82.6	81.8	80.9	80.1	79.3
23	86.0	85.1	84.2	83.4	82.5	81.6	80.8	79.9	79.1
24	85.9	85.0	84.1	83.2	82.4	81.5	80.6	79.8	78.9
25	85.8	84.9	84.0	83.1	82.2	81.4	80.5	79.6	78.8
26	85.7	84.8	83.9	83.0	82.1	81.2	80.4	79.5	78.6
27	85.6	84.8	83.9	82.9	82.0	81.1	80.3	79.4	78.5
28	85.6	84.7	83.8	82.9	82.0	81.0	80.1	79.3	78.4
29	85.5	84.6	83.7	82.8	81.9	81.0	80.1	79.2	78.3
30	85.4	84.6	83.6	82.7	81.8	80.9	80.0	79.1	78.2
31	85.4	84.5	83.6	82.6	81.7	80.8	79.9	79.0	78.1
32	85.3	84.4	83.5	82.6	81.6	80.7	79.8	78.9	78.0
33	85.3	84.4	83.5	82.5	81.6	80.7	79.7	78.8	77.9
34	85.2	84.3	83.4	82.5	81.5	80.6	79.7	78.7	77.8
35	85.2	84.3	83.4	82.4	81.5	80.5	79.6	78.7	77.7
36	85.2	84.3	83.3	82.4	81.4	80.5	79.5	78.6	77.7
37	85.1	84.2	83.3	82.3	81.4	80.4	79.5	78.5	77.6
38	85.1	84.2	83.2	82.3	81.3	80.4	79.4	78.5	77.6
39	85.1	84.2	83.2	82.3	81.3	80.3	79.4	78.4	77.5
40	85.0	84.1	83.2	82.2	81.3	80.3	79.3	78.4	77.4
41	85.0	84.1	83.1	82.2	81.2	80.3	79.3	78.4	77.4
42	85.0	84.1	83.1	82.2	81.2	80.2	79.3	78.3	77.4
43	84.9	84.0	83.1	82.1	81.2	80.2	79.2	78.3	77.3
44	84.9	84.0	83.1	82.1	81.1	80.2	79.2	78.2	77.3
45	84.9	84.0	83.0	82.1	81.1	80.1	79.2	78.2	77.3
46	84.9	84.0	83.0	82.1	81.1	80.1	79.2	78.2	77.2
47	84.9	84.0	83.0	82.0	81.1	80.1	79.1	78.2	77.2
48	84.8	83.9	83.0	82.0	81.0	80.1	79.1	78.1	77.2
49	84.8	83.9	83.0	82.0	81.0	80.1	79.1	78.1	77.1
50	84.8	83.9	82.9	82.0	81.0	80.0	79.1	78.1	77.1
51	84.8	83.9	82.9	82.0	81.0	80.0	79.0	78.1	77.1
52	84.8	83.9	82.9	81.9	81.0	80.0	79.0	78.0	77.1
53	84.8	83.9	82.9	81.9	81.0	80.0	79.0	78.0	77.1
54	84.7	83.9	82.9	81.9	80.9	80.0	79.0	78.0	77.0
55	84.7	83.8	82.9	81.9	80.9	79.9	79.0	78.0	77.0
56	84.7	83.8	82.9	81.9	80.9	79.9	79.0	78.0	77.0
57	84.7	83.8	82.9	81.9	80.9	79.9	78.9	78.0	77.0
58	84.7	83.8	82.8	81.9	80.9	79.9	78.9	78.0	77.0
59	84.7	83.8	82.8	81.9	80.9	79.9	78.9	77.9	77.0
60	84.7	83.8	82.8	81.8	80.9	79.9	78.9	77.9	76.9
61	84.7	83.8	82.8	81.8	80.9	79.9	78.9	77.9	76.9
62	84.7	83.8	82.8	81.8	80.9	79.9	78.9	77.9	76.9
63	84.6	83.8	82.8	81.8	80.8	79.9	78.9	77.9	76.9
64	84.6	83.8	82.8	81.8	80.8	79.9	78.9	77.9	76.9
65	84.6	83.8	82.8	81.8	80.8	79.8	78.9	77.9	76.9
66	84.6	83.7	82.8	81.8	80.8	79.8	78.9	77.9	76.9
67	84.6	83.7	82.8	81.8	80.8	79.8	78.8	77.9	76.9
68	84.6	83.7	82.8	81.8	80.8	79.8	78.8	77.9	76.9
69	84.6	83.7	82.8	81.8	80.8	79.8	78.8	77.9	76.9
70	84.6	83.7	82.8	81.8	80.8	79.8	78.8	77.8	76.9
71	84.6	83.7	82.8	81.8	80.8	79.8	78.8	77.8	76.9
72	84.6	83.7	82.8	81.8	80.8	79.8	78.8	77.8	76.9
73	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
74	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
75	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
76	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
77	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
78	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
79	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
80	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
81	84.6	83.7	82.7	81.8	80.8	79.8	78.8	77.8	76.8
82	84.6	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
83	84.6	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
84	84.6	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
85	84.6	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
86	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
87	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8

TABLE 3 TO PARAGRAPH (d)—JOINT AND LAST SURVIVOR TABLE—Continued

Ages	0	1	2	3	4	5	6	7	8
88	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
89	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
90	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
91	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
92	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
93	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
94	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
95	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
96	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
97	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
98	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
99	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
100	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
101	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
102	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
103	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
104	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
105	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
106	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
107	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
108	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
109	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
110	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
111	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
112	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
113	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
114	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
115	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
116	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
117	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
118	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
119	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8
120+	84.5	83.7	82.7	81.7	80.8	79.8	78.8	77.8	76.8

Ages	9	10	11	12	13	14	15	16	17
0	88.4	88.1	87.9	87.6	87.4	87.2	87.0	86.9	86.7
1	87.7	87.4	87.1	86.9	86.7	86.4	86.2	86.1	85.9
2	87.0	86.7	86.4	86.1	85.9	85.7	85.5	85.3	85.1
3	86.3	86.0	85.7	85.4	85.1	84.9	84.7	84.5	84.3
4	85.7	85.3	85.0	84.7	84.4	84.2	83.9	83.7	83.5
5	85.1	84.7	84.4	84.0	83.7	83.4	83.2	82.9	82.7
6	84.5	84.1	83.7	83.4	83.0	82.7	82.4	82.2	81.9
7	83.9	83.5	83.1	82.7	82.4	82.0	81.7	81.4	81.2
8	83.4	82.9	82.5	82.1	81.7	81.4	81.0	80.7	80.4
9	82.9	82.4	81.9	81.5	81.1	80.7	80.4	80.0	79.7
10	82.4	81.9	81.4	80.9	80.5	80.1	79.7	79.4	79.0
11	81.9	81.4	80.9	80.4	79.9	79.5	79.1	78.7	78.4
12	81.5	80.9	80.4	79.9	79.4	78.9	78.5	78.1	77.7
13	81.1	80.5	79.9	79.4	78.9	78.4	77.9	77.5	77.1
14	80.7	80.1	79.5	78.9	78.4	77.9	77.4	76.9	76.5
15	80.4	79.7	79.1	78.5	77.9	77.4	76.9	76.4	75.9
16	80.0	79.4	78.7	78.1	77.5	76.9	76.4	75.9	75.4
17	79.7	79.0	78.4	77.7	77.1	76.5	75.9	75.4	74.9
18	79.4	78.7	78.0	77.4	76.7	76.1	75.5	75.0	74.4
19	79.2	78.4	77.7	77.0	76.4	75.7	75.1	74.5	74.0
20	78.9	78.2	77.4	76.7	76.0	75.4	74.7	74.1	73.5
21	78.7	77.9	77.2	76.4	75.7	75.0	74.4	73.7	73.1
22	78.5	77.7	76.9	76.2	75.4	74.7	74.0	73.4	72.7
23	78.3	77.5	76.7	75.9	75.2	74.4	73.7	73.1	72.4
24	78.1	77.3	76.5	75.7	74.9	74.2	73.5	72.7	72.1
25	77.9	77.1	76.3	75.5	74.7	73.9	73.2	72.5	71.7
26	77.8	76.9	76.1	75.3	74.5	73.7	72.9	72.2	71.5
27	77.6	76.8	75.9	75.1	74.3	73.5	72.7	71.9	71.2
28	77.5	76.6	75.8	74.9	74.1	73.3	72.5	71.7	71.0
29	77.4	76.5	75.6	74.8	73.9	73.1	72.3	71.5	70.7
30	77.3	76.4	75.5	74.6	73.8	73.0	72.1	71.3	70.5
31	77.2	76.3	75.4	74.5	73.7	72.8	72.0	71.1	70.3
32	77.1	76.2	75.3	74.4	73.5	72.7	71.8	71.0	70.1
33	77.0	76.1	75.2	74.3	73.4	72.5	71.7	70.8	70.0
34	76.9	76.0	75.1	74.2	73.3	72.4	71.5	70.7	69.8

Ages	9	10	11	12	13	14	15	16	17
35	76.8	75.9	75.0	74.1	73.2	72.3	71.4	70.5	69.7
36	76.7	75.8	74.9	74.0	73.1	72.2	71.3	70.4	69.5
37	76.7	75.7	74.8	73.9	73.0	72.1	71.2	70.3	69.4
38	76.6	75.7	74.7	73.8	72.9	72.0	71.1	70.2	69.3
39	76.6	75.6	74.7	73.8	72.8	71.9	71.0	70.1	69.2
40	76.5	75.6	74.6	73.7	72.8	71.8	70.9	70.0	69.1
41	76.5	75.5	74.6	73.6	72.7	71.8	70.8	69.9	69.0
42	76.4	75.5	74.5	73.6	72.6	71.7	70.8	69.8	68.9
43	76.4	75.4	74.5	73.5	72.6	71.6	70.7	69.8	68.9
44	76.3	75.4	74.4	73.5	72.5	71.6	70.6	69.7	68.8
45	76.3	75.3	74.4	73.4	72.5	71.5	70.6	69.6	68.7
46	76.3	75.3	74.3	73.4	72.4	71.5	70.5	69.6	68.7
47	76.2	75.3	74.3	73.3	72.4	71.4	70.5	69.5	68.6
48	76.2	75.2	74.3	73.3	72.3	71.4	70.4	69.5	68.5
49	76.2	75.2	74.2	73.3	72.3	71.4	70.4	69.4	68.5
50	76.1	75.2	74.2	73.2	72.3	71.3	70.4	69.4	68.5
51	76.1	75.2	74.2	73.2	72.2	71.3	70.3	69.4	68.4
52	76.1	75.1	74.2	73.2	72.2	71.3	70.3	69.3	68.4
53	76.1	75.1	74.1	73.2	72.2	71.2	70.3	69.3	68.3
54	76.1	75.1	74.1	73.1	72.2	71.2	70.2	69.3	68.3
55	76.0	75.1	74.1	73.1	72.1	71.2	70.2	69.2	68.3
56	76.0	75.0	74.1	73.1	72.1	71.2	70.2	69.2	68.3
57	76.0	75.0	74.1	73.1	72.1	71.1	70.2	69.2	68.2
58	76.0	75.0	74.0	73.1	72.1	71.1	70.1	69.2	68.2
59	76.0	75.0	74.0	73.0	72.1	71.1	70.1	69.2	68.2
60	76.0	75.0	74.0	73.0	72.1	71.1	70.1	69.1	68.2
61	76.0	75.0	74.0	73.0	72.0	71.1	70.1	69.1	68.1
62	75.9	75.0	74.0	73.0	72.0	71.0	70.1	69.1	68.1
63	75.9	75.0	74.0	73.0	72.0	71.0	70.1	69.1	68.1
64	75.9	74.9	74.0	73.0	72.0	71.0	70.0	69.1	68.1
65	75.9	74.9	73.9	73.0	72.0	71.0	70.0	69.1	68.1
66	75.9	74.9	73.9	73.0	72.0	71.0	70.0	69.0	68.1
67	75.9	74.9	73.9	72.9	72.0	71.0	70.0	69.0	68.1
68	75.9	74.9	73.9	72.9	72.0	71.0	70.0	69.0	68.0
69	75.9	74.9	73.9	72.9	71.9	71.0	70.0	69.0	68.0
70	75.9	74.9	73.9	72.9	71.9	71.0	70.0	69.0	68.0
71	75.9	74.9	73.9	72.9	71.9	70.9	70.0	69.0	68.0
72	75.9	74.9	73.9	72.9	71.9	70.9	70.0	69.0	68.0
73	75.9	74.9	73.9	72.9	71.9	70.9	70.0	69.0	68.0
74	75.9	74.9	73.9	72.9	71.9	70.9	69.9	69.0	68.0
75	75.9	74.9	73.9	72.9	71.9	70.9	69.9	69.0	68.0
76	75.8	74.9	73.9	72.9	71.9	70.9	69.9	68.9	68.0
77	75.8	74.9	73.9	72.9	71.9	70.9	69.9	68.9	68.0
78	75.8	74.9	73.9	72.9	71.9	70.9	69.9	68.9	68.0
79	75.8	74.8	73.9	72.9	71.9	70.9	69.9	68.9	68.0
80	75.8	74.8	73.9	72.9	71.9	70.9	69.9	68.9	67.9
81	75.8	74.8	73.9	72.9	71.9	70.9	69.9	68.9	67.9
82	75.8	74.8	73.9	72.9	71.9	70.9	69.9	68.9	67.9
83	75.8	74.8	73.9	72.9	71.9	70.9	69.9	68.9	67.9
84	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
85	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
86	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
87	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
88	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
89	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
90	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
91	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
92	75.8	74.8	73.8	72.9	71.9	70.9	69.9	68.9	67.9
93	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
94	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
95	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
96	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
97	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
98	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
99	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
100	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
101	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
102	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
103	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
104	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
105	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
106	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
107	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
108	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9

Ages	9	10	11	12	13	14	15	16	17
109	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
110	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
111	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
112	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
113	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
114	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
115	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
116	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
117	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
118	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
119	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9
120+	75.8	74.8	73.8	72.8	71.9	70.9	69.9	68.9	67.9

Ages	18	19	20	21	22	23	24	25	26
0	86.6	86.4	86.3	86.2	86.1	86.0	85.9	85.8	85.7
1	85.7	85.6	85.5	85.3	85.2	85.1	85.0	84.9	84.8
2	84.9	84.7	84.6	84.5	84.3	84.2	84.1	84.0	83.9
3	84.1	83.9	83.8	83.6	83.5	83.4	83.2	83.1	83.0
4	83.3	83.1	82.9	82.8	82.6	82.5	82.4	82.2	82.1
5	82.5	82.3	82.1	81.9	81.8	81.6	81.5	81.4	81.2
6	81.7	81.5	81.3	81.1	80.9	80.8	80.6	80.5	80.4
7	80.9	80.7	80.5	80.3	80.1	79.9	79.8	79.6	79.5
8	80.2	79.9	79.7	79.5	79.3	79.1	78.9	78.8	78.6
9	79.4	79.2	78.9	78.7	78.5	78.3	78.1	77.9	77.8
10	78.7	78.4	78.2	77.9	77.7	77.5	77.3	77.1	76.9
11	78.0	77.7	77.4	77.2	76.9	76.7	76.5	76.3	76.1
12	77.4	77.0	76.7	76.4	76.2	75.9	75.7	75.5	75.3
13	76.7	76.4	76.0	75.7	75.4	75.2	74.9	74.7	74.5
14	76.1	75.7	75.4	75.0	74.7	74.4	74.2	73.9	73.7
15	75.5	75.1	74.7	74.4	74.0	73.7	73.5	73.2	72.9
16	75.0	74.5	74.1	73.7	73.4	73.1	72.7	72.5	72.2
17	74.4	74.0	73.5	73.1	72.7	72.4	72.1	71.7	71.5
18	73.9	73.4	73.0	72.5	72.1	71.7	71.4	71.1	70.8
19	73.4	72.9	72.4	72.0	71.5	71.1	70.8	70.4	70.1
20	73.0	72.4	71.9	71.4	71.0	70.5	70.1	69.8	69.4
21	72.5	72.0	71.4	70.9	70.4	70.0	69.5	69.1	68.8
22	72.1	71.5	71.0	70.4	69.9	69.4	69.0	68.5	68.1
23	71.7	71.1	70.5	70.0	69.4	68.9	68.4	68.0	67.6
24	71.4	70.8	70.1	69.5	69.0	68.4	67.9	67.4	67.0
25	71.1	70.4	69.8	69.1	68.5	68.0	67.4	66.9	66.5
26	70.8	70.1	69.4	68.8	68.1	67.6	67.0	66.5	65.9
27	70.5	69.8	69.1	68.4	67.8	67.2	66.6	66.0	65.5
28	70.2	69.5	68.8	68.1	67.4	66.8	66.2	65.6	65.0
29	70.0	69.2	68.5	67.8	67.1	66.4	65.8	65.2	64.6
30	69.7	69.0	68.2	67.5	66.8	66.1	65.4	64.8	64.2
31	69.5	68.7	68.0	67.2	66.5	65.8	65.1	64.4	63.8
32	69.3	68.5	67.7	67.0	66.2	65.5	64.8	64.1	63.4
33	69.1	68.3	67.5	66.7	66.0	65.2	64.5	63.8	63.1
34	69.0	68.1	67.3	66.5	65.8	65.0	64.2	63.5	62.8
35	68.8	68.0	67.2	66.3	65.5	64.8	64.0	63.3	62.5
36	68.7	67.8	67.0	66.2	65.4	64.6	63.8	63.0	62.3
37	68.5	67.7	66.8	66.0	65.2	64.4	63.6	62.8	62.0
38	68.4	67.6	66.7	65.8	65.0	64.2	63.4	62.6	61.8
39	68.3	67.4	66.6	65.7	64.9	64.0	63.2	62.4	61.6
40	68.2	67.3	66.4	65.6	64.7	63.9	63.0	62.2	61.4
41	68.1	67.2	66.3	65.4	64.6	63.7	62.9	62.0	61.2
42	68.0	67.1	66.2	65.3	64.5	63.6	62.7	61.9	61.0
43	67.9	67.0	66.1	65.2	64.3	63.5	62.6	61.7	60.9
44	67.9	66.9	66.0	65.1	64.2	63.4	62.5	61.6	60.7
45	67.8	66.9	66.0	65.0	64.1	63.3	62.4	61.5	60.6
46	67.7	66.8	65.9	65.0	64.1	63.2	62.3	61.4	60.5
47	67.7	66.7	65.8	64.9	64.0	63.1	62.2	61.3	60.4
48	67.6	66.7	65.7	64.8	63.9	63.0	62.1	61.2	60.3
49	67.6	66.6	65.7	64.8	63.8	62.9	62.0	61.1	60.2
50	67.5	66.6	65.6	64.7	63.8	62.8	61.9	61.0	60.1
51	67.5	66.5	65.6	64.6	63.7	62.8	61.9	60.9	60.0
52	67.4	66.5	65.5	64.6	63.7	62.7	61.8	60.9	60.0
53	67.4	66.4	65.5	64.5	63.6	62.7	61.7	60.8	59.9
54	67.4	66.4	65.4	64.5	63.6	62.6	61.7	60.7	59.8
55	67.3	66.4	65.4	64.5	63.5	62.6	61.6	60.7	59.8
56	67.3	66.3	65.4	64.4	63.5	62.5	61.6	60.6	59.7
57	67.3	66.3	65.3	64.4	63.4	62.5	61.5	60.6	59.7

Ages	18	19	20	21	22	23	24	25	26
58	67.2	66.3	65.3	64.4	63.4	62.5	61.5	60.6	59.6
59	67.2	66.3	65.3	64.3	63.4	62.4	61.5	60.5	59.6
60	67.2	66.2	65.3	64.3	63.3	62.4	61.4	60.5	59.5
61	67.2	66.2	65.2	64.3	63.3	62.4	61.4	60.5	59.5
62	67.2	66.2	65.2	64.3	63.3	62.3	61.4	60.4	59.5
63	67.1	66.2	65.2	64.2	63.3	62.3	61.4	60.4	59.4
64	67.1	66.2	65.2	64.2	63.3	62.3	61.3	60.4	59.4
65	67.1	66.1	65.2	64.2	63.2	62.3	61.3	60.3	59.4
66	67.1	66.1	65.2	64.2	63.2	62.2	61.3	60.3	59.4
67	67.1	66.1	65.1	64.2	63.2	62.2	61.3	60.3	59.3
68	67.1	66.1	65.1	64.2	63.2	62.2	61.3	60.3	59.3
69	67.1	66.1	65.1	64.1	63.2	62.2	61.2	60.3	59.3
70	67.0	66.1	65.1	64.1	63.2	62.2	61.2	60.3	59.3
71	67.0	66.1	65.1	64.1	63.1	62.2	61.2	60.2	59.3
72	67.0	66.1	65.1	64.1	63.1	62.2	61.2	60.2	59.3
73	67.0	66.0	65.1	64.1	63.1	62.1	61.2	60.2	59.3
74	67.0	66.0	65.1	64.1	63.1	62.1	61.2	60.2	59.2
75	67.0	66.0	65.0	64.1	63.1	62.1	61.2	60.2	59.2
76	67.0	66.0	65.0	64.1	63.1	62.1	61.2	60.2	59.2
77	67.0	66.0	65.0	64.1	63.1	62.1	61.1	60.2	59.2
78	67.0	66.0	65.0	64.1	63.1	62.1	61.1	60.2	59.2
79	67.0	66.0	65.0	64.0	63.1	62.1	61.1	60.2	59.2
80	67.0	66.0	65.0	64.0	63.1	62.1	61.1	60.2	59.2
81	67.0	66.0	65.0	64.0	63.1	62.1	61.1	60.1	59.2
82	67.0	66.0	65.0	64.0	63.1	62.1	61.1	60.1	59.2
83	67.0	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.2
84	67.0	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.2
85	67.0	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.2
86	67.0	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.2
87	66.9	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.1
88	66.9	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.1
89	66.9	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.1
90	66.9	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.1
91	66.9	66.0	65.0	64.0	63.0	62.1	61.1	60.1	59.1
92	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
93	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
94	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
95	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
96	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
97	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
98	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
99	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
100	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
101	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
102	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
103	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
104	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
105	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
106	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
107	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
108	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
109	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
110	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
111	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
112	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
113	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
114	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
115	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
116	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
117	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
118	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
119	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1
120+	66.9	66.0	65.0	64.0	63.0	62.0	61.1	60.1	59.1

Ages	27	28	29	30	31	32	33	34	35
0	85.6	85.6	85.5	85.4	85.4	85.3	85.3	85.2	85.2
1	84.8	84.7	84.6	84.6	84.5	84.4	84.4	84.3	84.3
2	83.9	83.8	83.7	83.6	83.6	83.5	83.5	83.4	83.4
3	82.9	82.9	82.8	82.7	82.6	82.6	82.5	82.5	82.4
4	82.0	82.0	81.9	81.8	81.7	81.6	81.6	81.5	81.5
5	81.1	81.0	81.0	80.9	80.8	80.7	80.7	80.6	80.5
6	80.3	80.1	80.1	80.0	79.9	79.8	79.7	79.7	79.6

Ages	27	28	29	30	31	32	33	34	35
7	79.4	79.3	79.2	79.1	79.0	78.9	78.8	78.7	78.7
8	78.5	78.4	78.3	78.2	78.1	78.0	77.9	77.8	77.7
9	77.6	77.5	77.4	77.3	77.2	77.1	77.0	76.9	76.8
10	76.8	76.6	76.5	76.4	76.3	76.2	76.1	76.0	75.9
11	75.9	75.8	75.6	75.5	75.4	75.3	75.2	75.1	75.0
12	75.1	74.9	74.8	74.6	74.5	74.4	74.3	74.2	74.1
13	74.3	74.1	73.9	73.8	73.7	73.5	73.4	73.3	73.2
14	73.5	73.3	73.1	73.0	72.8	72.7	72.5	72.4	72.3
15	72.7	72.5	72.3	72.1	72.0	71.8	71.7	71.5	71.4
16	71.9	71.7	71.5	71.3	71.1	71.0	70.8	70.7	70.5
17	71.2	71.0	70.7	70.5	70.3	70.1	70.0	69.8	69.7
18	70.5	70.2	70.0	69.7	69.5	69.3	69.1	69.0	68.8
19	69.8	69.5	69.2	69.0	68.7	68.5	68.3	68.1	68.0
20	69.1	68.8	68.5	68.2	68.0	67.7	67.5	67.3	67.2
21	68.4	68.1	67.8	67.5	67.2	67.0	66.7	66.5	66.3
22	67.8	67.4	67.1	66.8	66.5	66.2	66.0	65.8	65.5
23	67.2	66.8	66.4	66.1	65.8	65.5	65.2	65.0	64.8
24	66.6	66.2	65.8	65.4	65.1	64.8	64.5	64.2	64.0
25	66.0	65.6	65.2	64.8	64.4	64.1	63.8	63.5	63.3
26	65.5	65.0	64.6	64.2	63.8	63.4	63.1	62.8	62.5
27	65.0	64.5	64.0	63.6	63.2	62.8	62.5	62.1	61.8
28	64.5	64.0	63.5	63.0	62.6	62.2	61.8	61.5	61.1
29	64.0	63.5	63.0	62.5	62.0	61.6	61.2	60.8	60.5
30	63.6	63.0	62.5	62.0	61.5	61.0	60.6	60.2	59.8
31	63.2	62.6	62.0	61.5	61.0	60.5	60.1	59.6	59.2
32	62.8	62.2	61.6	61.0	60.5	60.0	59.5	59.1	58.6
33	62.5	61.8	61.2	60.6	60.1	59.5	59.0	58.5	58.1
34	62.1	61.5	60.8	60.2	59.6	59.1	58.5	58.0	57.5
35	61.8	61.1	60.5	59.8	59.2	58.6	58.1	57.5	57.0
36	61.5	60.8	60.1	59.5	58.8	58.2	57.6	57.1	56.6
37	61.3	60.5	59.8	59.2	58.5	57.9	57.2	56.7	56.1
38	61.0	60.3	59.6	58.9	58.2	57.5	56.9	56.3	55.7
39	60.8	60.0	59.3	58.6	57.9	57.2	56.5	55.9	55.3
40	60.6	59.8	59.0	58.3	57.6	56.9	56.2	55.5	54.9
41	60.4	59.6	58.8	58.1	57.3	56.6	55.9	55.2	54.5
42	60.2	59.4	58.6	57.8	57.1	56.3	55.6	54.9	54.2
43	60.1	59.2	58.4	57.6	56.8	56.1	55.3	54.6	53.9
44	59.9	59.1	58.2	57.4	56.6	55.9	55.1	54.4	53.6
45	59.8	58.9	58.1	57.3	56.4	55.7	54.9	54.1	53.4
46	59.6	58.8	57.9	57.1	56.3	55.5	54.7	53.9	53.1
47	59.5	58.6	57.8	56.9	56.1	55.3	54.5	53.7	52.9
48	59.4	58.5	57.7	56.8	56.0	55.1	54.3	53.5	52.7
49	59.3	58.4	57.5	56.7	55.8	55.0	54.1	53.3	52.5
50	59.2	58.3	57.4	56.6	55.7	54.8	54.0	53.2	52.3
51	59.1	58.2	57.3	56.5	55.6	54.7	53.9	53.0	52.2
52	59.0	58.1	57.2	56.4	55.5	54.6	53.7	52.9	52.0
53	59.0	58.1	57.2	56.3	55.4	54.5	53.6	52.7	51.9
54	58.9	58.0	57.1	56.2	55.3	54.4	53.5	52.6	51.8
55	58.8	57.9	57.0	56.1	55.2	54.3	53.4	52.5	51.7
56	58.8	57.9	56.9	56.0	55.1	54.2	53.3	52.4	51.6
57	58.7	57.8	56.9	56.0	55.0	54.1	53.2	52.3	51.5
58	58.7	57.7	56.8	55.9	55.0	54.1	53.2	52.3	51.4
59	58.6	57.7	56.8	55.8	54.9	54.0	53.1	52.2	51.3
60	58.6	57.7	56.7	55.8	54.9	53.9	53.0	52.1	51.2
61	58.6	57.6	56.7	55.7	54.8	53.9	53.0	52.1	51.1
62	58.5	57.6	56.6	55.7	54.8	53.8	52.9	52.0	51.1
63	58.5	57.5	56.6	55.7	54.7	53.8	52.9	51.9	51.0
64	58.5	57.5	56.6	55.6	54.7	53.8	52.8	51.9	51.0
65	58.4	57.5	56.5	55.6	54.7	53.7	52.8	51.9	50.9
66	58.4	57.5	56.5	55.6	54.6	53.7	52.7	51.8	50.9
67	58.4	57.4	56.5	55.5	54.6	53.7	52.7	51.8	50.8
68	58.4	57.4	56.5	55.5	54.6	53.6	52.7	51.7	50.8
69	58.4	57.4	56.4	55.5	54.5	53.6	52.7	51.7	50.8
70	58.3	57.4	56.4	55.5	54.5	53.6	52.6	51.7	50.7
71	58.3	57.4	56.4	55.5	54.5	53.6	52.6	51.7	50.7
72	58.3	57.3	56.4	55.4	54.5	53.5	52.6	51.6	50.7
73	58.3	57.3	56.4	55.4	54.5	53.5	52.6	51.6	50.7
74	58.3	57.3	56.4	55.4	54.5	53.5	52.5	51.6	50.6
75	58.3	57.3	56.3	55.4	54.4	53.5	52.5	51.6	50.6
76	58.3	57.3	56.3	55.4	54.4	53.5	52.5	51.6	50.6
77	58.2	57.3	56.3	55.4	54.4	53.5	52.5	51.6	50.6
78	58.2	57.3	56.3	55.4	54.4	53.4	52.5	51.5	50.6
79	58.2	57.3	56.3	55.4	54.4	53.4	52.5	51.5	50.6
80	58.2	57.3	56.3	55.3	54.4	53.4	52.5	51.5	50.6

Ages	27	28	29	30	31	32	33	34	35
81	58.2	57.3	56.3	55.3	54.4	53.4	52.5	51.5	50.6
82	58.2	57.2	56.3	55.3	54.4	53.4	52.5	51.5	50.5
83	58.2	57.2	56.3	55.3	54.4	53.4	52.5	51.5	50.5
84	58.2	57.2	56.3	55.3	54.4	53.4	52.4	51.5	50.5
85	58.2	57.2	56.3	55.3	54.4	53.4	52.4	51.5	50.5
86	58.2	57.2	56.3	55.3	54.3	53.4	52.4	51.5	50.5
87	58.2	57.2	56.3	55.3	54.3	53.4	52.4	51.5	50.5
88	58.2	57.2	56.3	55.3	54.3	53.4	52.4	51.5	50.5
89	58.2	57.2	56.3	55.3	54.3	53.4	52.4	51.5	50.5
90	58.2	57.2	56.3	55.3	54.3	53.4	52.4	51.5	50.5
91	58.2	57.2	56.3	55.3	54.3	53.4	52.4	51.5	50.5
92	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
93	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
94	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
95	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
96	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
97	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
98	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
99	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
100	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.5	50.5
101	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
102	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
103	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
104	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
105	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
106	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
107	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
108	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
109	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
110	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
111	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
112	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
113	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
114	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
115	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
116	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
117	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
118	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
119	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5
120+	58.2	57.2	56.2	55.3	54.3	53.4	52.4	51.4	50.5

Ages	36	37	38	39	40	41	42	43	44
0	85.2	85.1	85.1	85.1	85.0	85.0	85.0	84.9	84.9
1	84.3	84.2	84.2	84.2	84.1	84.1	84.1	84.0	84.0
2	83.3	83.3	83.2	83.2	83.2	83.1	83.1	83.1	83.1
3	82.4	82.3	82.3	82.3	82.2	82.2	82.2	82.1	82.1
4	81.4	81.4	81.3	81.3	81.3	81.2	81.2	81.2	81.1
5	80.5	80.4	80.4	80.3	80.3	80.3	80.2	80.2	80.2
6	79.5	79.5	79.4	79.4	79.3	79.3	79.3	79.2	79.2
7	78.6	78.5	78.5	78.4	78.4	78.4	78.3	78.3	78.2
8	77.7	77.6	77.6	77.5	77.4	77.4	77.4	77.3	77.3
9	76.7	76.7	76.6	76.6	76.5	76.5	76.4	76.4	76.3
10	75.8	75.7	75.7	75.6	75.6	75.5	75.5	75.4	75.4
11	74.9	74.8	74.7	74.7	74.6	74.6	74.5	74.5	74.4
12	74.0	73.9	73.8	73.8	73.7	73.6	73.6	73.5	73.5
13	73.1	73.0	72.9	72.8	72.8	72.7	72.6	72.6	72.5
14	72.2	72.1	72.0	71.9	71.8	71.8	71.7	71.6	71.6
15	71.3	71.2	71.1	71.0	70.9	70.8	70.8	70.7	70.6
16	70.4	70.3	70.2	70.1	70.0	69.9	69.8	69.8	69.7
17	69.5	69.4	69.3	69.2	69.1	69.0	68.9	68.9	68.8
18	68.7	68.5	68.4	68.3	68.2	68.1	68.0	67.9	67.9
19	67.8	67.7	67.6	67.4	67.3	67.2	67.1	67.0	66.9
20	67.0	66.8	66.7	66.6	66.4	66.3	66.2	66.1	66.0
21	66.2	66.0	65.8	65.7	65.6	65.4	65.3	65.2	65.1
22	65.4	65.2	65.0	64.9	64.7	64.6	64.5	64.3	64.2
23	64.6	64.4	64.2	64.0	63.9	63.7	63.6	63.5	63.4
24	63.8	63.6	63.4	63.2	63.0	62.9	62.7	62.6	62.5
25	63.0	62.8	62.6	62.4	62.2	62.0	61.9	61.7	61.6
26	62.3	62.0	61.8	61.6	61.4	61.2	61.0	60.9	60.7
27	61.5	61.3	61.0	60.8	60.6	60.4	60.2	60.1	59.9
28	60.8	60.5	60.3	60.0	59.8	59.6	59.4	59.2	59.1
29	60.1	59.8	59.6	59.3	59.0	58.8	58.6	58.4	58.2

Ages	36	37	38	39	40	41	42	43	44
30	59.5	59.2	58.9	58.6	58.3	58.1	57.8	57.6	57.4
31	58.8	58.5	58.2	57.9	57.6	57.3	57.1	56.8	56.6
32	58.2	57.9	57.5	57.2	56.9	56.6	56.3	56.1	55.9
33	57.6	57.2	56.9	56.5	56.2	55.9	55.6	55.3	55.1
34	57.1	56.7	56.3	55.9	55.5	55.2	54.9	54.6	54.4
35	56.6	56.1	55.7	55.3	54.9	54.5	54.2	53.9	53.6
36	56.0	55.6	55.1	54.7	54.3	53.9	53.6	53.2	52.9
37	55.6	55.1	54.6	54.1	53.7	53.3	52.9	52.6	52.2
38	55.1	54.6	54.1	53.6	53.1	52.7	52.3	51.9	51.6
39	54.7	54.1	53.6	53.1	52.6	52.1	51.7	51.3	50.9
40	54.3	53.7	53.1	52.6	52.1	51.6	51.2	50.7	50.3
41	53.9	53.3	52.7	52.1	51.6	51.1	50.6	50.2	49.7
42	53.6	52.9	52.3	51.7	51.2	50.6	50.1	49.6	49.2
43	53.2	52.6	51.9	51.3	50.7	50.2	49.6	49.1	48.6
44	52.9	52.2	51.6	50.9	50.3	49.7	49.2	48.6	48.1
45	52.6	51.9	51.3	50.6	50.0	49.3	48.7	48.2	47.7
46	52.4	51.7	50.9	50.3	49.6	49.0	48.3	47.8	47.2
47	52.1	51.4	50.7	50.0	49.3	48.6	48.0	47.4	46.8
48	51.9	51.2	50.4	49.7	49.0	48.3	47.6	47.0	46.4
49	51.7	50.9	50.2	49.4	48.7	48.0	47.3	46.6	46.0
50	51.5	50.7	49.9	49.2	48.4	47.7	47.0	46.3	45.7
51	51.4	50.5	49.7	49.0	48.2	47.5	46.7	46.0	45.3
52	51.2	50.4	49.6	48.8	48.0	47.2	46.5	45.7	45.0
53	51.0	50.2	49.4	48.6	47.8	47.0	46.2	45.5	44.8
54	50.9	50.1	49.2	48.4	47.6	46.8	46.0	45.3	44.5
55	50.8	49.9	49.1	48.2	47.4	46.6	45.8	45.0	44.3
56	50.7	49.8	48.9	48.1	47.3	46.4	45.6	44.8	44.1
57	50.6	49.7	48.8	48.0	47.1	46.3	45.5	44.7	43.9
58	50.5	49.6	48.7	47.8	47.0	46.1	45.3	44.5	43.7
59	50.4	49.5	48.6	47.7	46.9	46.0	45.2	44.3	43.5
60	50.3	49.4	48.5	47.6	46.8	45.9	45.0	44.2	43.4
61	50.2	49.3	48.4	47.5	46.7	45.8	44.9	44.1	43.2
62	50.2	49.3	48.4	47.5	46.6	45.7	44.8	43.9	43.1
63	50.1	49.2	48.3	47.4	46.5	45.6	44.7	43.8	43.0
64	50.0	49.1	48.2	47.3	46.4	45.5	44.6	43.7	42.9
65	50.0	49.1	48.2	47.2	46.3	45.4	44.5	43.6	42.8
66	50.0	49.0	48.1	47.2	46.3	45.4	44.5	43.6	42.7
67	49.9	49.0	48.0	47.1	46.2	45.3	44.4	43.5	42.6
68	49.9	48.9	48.0	47.1	46.2	45.2	44.3	43.4	42.5
69	49.8	48.9	48.0	47.0	46.1	45.2	44.3	43.3	42.4
70	49.8	48.9	47.9	47.0	46.1	45.1	44.2	43.3	42.4
71	49.8	48.8	47.9	47.0	46.0	45.1	44.2	43.2	42.3
72	49.7	48.8	47.9	46.9	46.0	45.0	44.1	43.2	42.3
73	49.7	48.8	47.8	46.9	45.9	45.0	44.1	43.1	42.2
74	49.7	48.8	47.8	46.9	45.9	45.0	44.0	43.1	42.2
75	49.7	48.7	47.8	46.8	45.9	44.9	44.0	43.1	42.1
76	49.7	48.7	47.8	46.8	45.9	44.9	44.0	43.0	42.1
77	49.6	48.7	47.7	46.8	45.8	44.9	43.9	43.0	42.1
78	49.6	48.7	47.7	46.8	45.8	44.9	43.9	43.0	42.0
79	49.6	48.7	47.7	46.8	45.8	44.9	43.9	43.0	42.0
80	49.6	48.7	47.7	46.7	45.8	44.8	43.9	42.9	42.0
81	49.6	48.6	47.7	46.7	45.8	44.8	43.9	42.9	42.0
82	49.6	48.6	47.7	46.7	45.8	44.8	43.9	42.9	42.0
83	49.6	48.6	47.7	46.7	45.8	44.8	43.8	42.9	41.9
84	49.6	48.6	47.7	46.7	45.7	44.8	43.8	42.9	41.9
85	49.6	48.6	47.7	46.7	45.7	44.8	43.8	42.9	41.9
86	49.6	48.6	47.6	46.7	45.7	44.8	43.8	42.9	41.9
87	49.6	48.6	47.6	46.7	45.7	44.8	43.8	42.9	41.9
88	49.6	48.6	47.6	46.7	45.7	44.8	43.8	42.8	41.9
89	49.6	48.6	47.6	46.7	45.7	44.8	43.8	42.8	41.9
90	49.5	48.6	47.6	46.7	45.7	44.8	43.8	42.8	41.9
91	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
92	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
93	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
94	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
95	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
96	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
97	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
98	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
99	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
100	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
101	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
102	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
103	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9

Ages	36	37	38	39	40	41	42	43	44
104	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
105	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
106	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
107	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
108	49.5	48.6	47.6	46.7	45.7	44.7	43.8	42.8	41.9
109	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.9
110	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.9
111	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.9
112	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.9
113	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.9
114	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.9
115	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.9
116	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.8
117	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.8
118	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.8
119	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.8
120+	49.5	48.6	47.6	46.6	45.7	44.7	43.8	42.8	41.8

Ages	45	46	47	48	49	50	51	52	53
0	84.9	84.9	84.9	84.8	84.8	84.8	84.8	84.8	84.8
1	84.0	84.0	84.0	83.9	83.9	83.9	83.9	83.9	83.9
2	83.0	83.0	83.0	83.0	83.0	82.9	82.9	82.9	82.9
3	82.1	82.1	82.0	82.0	82.0	82.0	82.0	81.9	81.9
4	81.1	81.1	81.1	81.0	81.0	81.0	81.0	81.0	81.0
5	80.1	80.1	80.1	80.1	80.1	80.0	80.0	80.0	80.0
6	79.2	79.2	79.1	79.1	79.1	79.1	79.0	79.0	79.0
7	78.2	78.2	78.2	78.1	78.1	78.1	78.1	78.0	78.0
8	77.3	77.2	77.2	77.2	77.1	77.1	77.1	77.1	77.1
9	76.3	76.3	76.2	76.2	76.2	76.1	76.1	76.1	76.1
10	75.3	75.3	75.3	75.2	75.2	75.2	75.2	75.1	75.1
11	74.4	74.3	74.3	74.3	74.2	74.2	74.2	74.2	74.1
12	73.4	73.4	73.3	73.3	73.3	73.2	73.2	73.2	73.2
13	72.5	72.4	72.4	72.3	72.3	72.3	72.2	72.2	72.2
14	71.5	71.5	71.4	71.4	71.4	71.3	71.3	71.3	71.2
15	70.6	70.5	70.5	70.4	70.4	70.4	70.3	70.3	70.3
16	69.6	69.6	69.5	69.5	69.4	69.4	69.4	69.3	69.3
17	68.7	68.7	68.6	68.5	68.5	68.5	68.4	68.4	68.3
18	67.8	67.7	67.7	67.6	67.6	67.5	67.5	67.4	67.4
19	66.9	66.8	66.7	66.7	66.6	66.6	66.5	66.5	66.4
20	66.0	65.9	65.8	65.7	65.7	65.6	65.6	65.5	65.5
21	65.0	65.0	64.9	64.8	64.8	64.7	64.6	64.6	64.5
22	64.1	64.1	64.0	63.9	63.8	63.8	63.7	63.7	63.6
23	63.3	63.2	63.1	63.0	62.9	62.8	62.8	62.7	62.7
24	62.4	62.3	62.2	62.1	62.0	61.9	61.9	61.8	61.7
25	61.5	61.4	61.3	61.2	61.1	61.0	60.9	60.9	60.8
26	60.6	60.5	60.4	60.3	60.2	60.1	60.0	60.0	59.9
27	59.8	59.6	59.5	59.4	59.3	59.2	59.1	59.0	59.0
28	58.9	58.8	58.6	58.5	58.4	58.3	58.2	58.1	58.1
29	58.1	57.9	57.8	57.7	57.5	57.4	57.3	57.2	57.2
30	57.3	57.1	56.9	56.8	56.7	56.6	56.5	56.4	56.3
31	56.4	56.3	56.1	56.0	55.8	55.7	55.6	55.5	55.4
32	55.7	55.5	55.3	55.1	55.0	54.8	54.7	54.6	54.5
33	54.9	54.7	54.5	54.3	54.1	54.0	53.9	53.7	53.6
34	54.1	53.9	53.7	53.5	53.3	53.2	53.0	52.9	52.7
35	53.4	53.1	52.9	52.7	52.5	52.3	52.2	52.0	51.9
36	52.6	52.4	52.1	51.9	51.7	51.5	51.4	51.2	51.0
37	51.9	51.7	51.4	51.2	50.9	50.7	50.5	50.4	50.2
38	51.3	50.9	50.7	50.4	50.2	49.9	49.7	49.6	49.4
39	50.6	50.3	50.0	49.7	49.4	49.2	49.0	48.8	48.6
40	50.0	49.6	49.3	49.0	48.7	48.4	48.2	48.0	47.8
41	49.3	49.0	48.6	48.3	48.0	47.7	47.5	47.2	47.0
42	48.7	48.3	48.0	47.6	47.3	47.0	46.7	46.5	46.2
43	48.2	47.8	47.4	47.0	46.6	46.3	46.0	45.7	45.5
44	47.7	47.2	46.8	46.4	46.0	45.7	45.3	45.0	44.8
45	47.1	46.7	46.2	45.8	45.4	45.0	44.7	44.4	44.1
46	46.7	46.2	45.7	45.2	44.8	44.4	44.0	43.7	43.4
47	46.2	45.7	45.2	44.7	44.2	43.8	43.4	43.1	42.7
48	45.8	45.2	44.7	44.2	43.7	43.3	42.8	42.4	42.1
49	45.4	44.8	44.2	43.7	43.2	42.7	42.3	41.9	41.5
50	45.0	44.4	43.8	43.3	42.7	42.2	41.7	41.3	40.9
51	44.7	44.0	43.4	42.8	42.3	41.7	41.2	40.8	40.3
52	44.4	43.7	43.1	42.4	41.9	41.3	40.8	40.3	39.8

Ages	45	46	47	48	49	50	51	52	53
53	44.1	43.4	42.7	42.1	41.5	40.9	40.3	39.8	39.3
54	43.8	43.1	42.4	41.7	41.1	40.5	39.9	39.3	38.8
55	43.5	42.8	42.1	41.4	40.8	40.1	39.5	38.9	38.4
56	43.3	42.5	41.8	41.1	40.4	39.8	39.1	38.5	38.0
57	43.1	42.3	41.6	40.8	40.1	39.5	38.8	38.2	37.6
58	42.9	42.1	41.3	40.6	39.9	39.2	38.5	37.8	37.2
59	42.7	41.9	41.1	40.4	39.6	38.9	38.2	37.5	36.9
60	42.5	41.7	40.9	40.1	39.4	38.6	37.9	37.2	36.6
61	42.4	41.6	40.7	40.0	39.2	38.4	37.7	37.0	36.3
62	42.2	41.4	40.6	39.8	39.0	38.2	37.5	36.7	36.0
63	42.1	41.3	40.4	39.6	38.8	38.0	37.2	36.5	35.8
64	42.0	41.1	40.3	39.5	38.6	37.8	37.0	36.3	35.5
65	41.9	41.0	40.2	39.3	38.5	37.7	36.9	36.1	35.3
66	41.8	40.9	40.0	39.2	38.4	37.5	36.7	35.9	35.1
67	41.7	40.8	39.9	39.1	38.2	37.4	36.6	35.7	35.0
68	41.6	40.7	39.8	39.0	38.1	37.3	36.4	35.6	34.8
69	41.5	40.6	39.8	38.9	38.0	37.1	36.3	35.5	34.6
70	41.5	40.6	39.7	38.8	37.9	37.0	36.2	35.3	34.5
71	41.4	40.5	39.6	38.7	37.8	36.9	36.1	35.2	34.4
72	41.3	40.4	39.5	38.6	37.7	36.9	36.0	35.1	34.3
73	41.3	40.4	39.5	38.6	37.7	36.8	35.9	35.0	34.2
74	41.2	40.3	39.4	38.5	37.6	36.7	35.8	34.9	34.1
75	41.2	40.3	39.4	38.4	37.5	36.6	35.7	34.9	34.0
76	41.2	40.2	39.3	38.4	37.5	36.6	35.7	34.8	33.9
77	41.1	40.2	39.3	38.4	37.4	36.5	35.6	34.7	33.9
78	41.1	40.2	39.2	38.3	37.4	36.5	35.6	34.7	33.8
79	41.1	40.1	39.2	38.3	37.4	36.4	35.5	34.6	33.7
80	41.1	40.1	39.2	38.2	37.3	36.4	35.5	34.6	33.7
81	41.0	40.1	39.1	38.2	37.3	36.4	35.4	34.5	33.6
82	41.0	40.1	39.1	38.2	37.3	36.3	35.4	34.5	33.6
83	41.0	40.0	39.1	38.2	37.2	36.3	35.4	34.5	33.6
84	41.0	40.0	39.1	38.1	37.2	36.3	35.4	34.4	33.5
85	41.0	40.0	39.1	38.1	37.2	36.3	35.3	34.4	33.5
86	41.0	40.0	39.1	38.1	37.2	36.2	35.3	34.4	33.5
87	40.9	40.0	39.0	38.1	37.2	36.2	35.3	34.4	33.5
88	40.9	40.0	39.0	38.1	37.1	36.2	35.3	34.4	33.4
89	40.9	40.0	39.0	38.1	37.1	36.2	35.3	34.3	33.4
90	40.9	40.0	39.0	38.1	37.1	36.2	35.3	34.3	33.4
91	40.9	40.0	39.0	38.1	37.1	36.2	35.2	34.3	33.4
92	40.9	40.0	39.0	38.1	37.1	36.2	35.2	34.3	33.4
93	40.9	40.0	39.0	38.1	37.1	36.2	35.2	34.3	33.4
94	40.9	40.0	39.0	38.1	37.1	36.2	35.2	34.3	33.4
95	40.9	40.0	39.0	38.0	37.1	36.2	35.2	34.3	33.4
96	40.9	39.9	39.0	38.0	37.1	36.2	35.2	34.3	33.4
97	40.9	39.9	39.0	38.0	37.1	36.2	35.2	34.3	33.4
98	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.4
99	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
100	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
101	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
102	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
103	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
104	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
105	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
106	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
107	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
108	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
109	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
110	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
111	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
112	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
113	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
114	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
115	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
116	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
117	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
118	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
119	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3
120+	40.9	39.9	39.0	38.0	37.1	36.1	35.2	34.3	33.3

Ages	54	55	56	57	58	59	60	61	62
0	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
1	83.9x	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8

Ages	54	55	56	57	58	59	60	61	62
2	82.9	82.9	82.9	82.9	82.8	82.8	82.8	82.8	82.8
3	81.9	81.9	81.9	81.9	81.9	81.9	81.8	81.8	81.8
4	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
5	80.0	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9
6	79.0	79.0	79.0	78.9	78.9	78.9	78.9	78.9	78.9
7	78.0	78.0	78.0	78.0	78.0	77.9	77.9	77.9	77.9
8	77.0	77.0	77.0	77.0	77.0	77.0	77.0	76.9	76.9
9	76.1	76.0	76.0	76.0	76.0	76.0	76.0	76.0	75.9
10	75.1	75.1	75.0	75.0	75.0	75.0	75.0	75.0	75.0
11	74.1	74.1	74.1	74.1	74.0	74.0	74.0	74.0	74.0
12	73.1	73.1	73.1	73.1	73.1	73.0	73.0	73.0	73.0
13	72.2	72.1	72.1	72.1	72.1	72.1	72.1	72.0	72.0
14	71.2	71.2	71.2	71.1	71.1	71.1	71.1	71.1	71.0
15	70.2	70.2	70.2	70.2	70.1	70.1	70.1	70.1	70.1
16	69.3	69.2	69.2	69.2	69.2	69.2	69.1	69.1	69.1
17	68.3	68.3	68.3	68.2	68.2	68.2	68.2	68.1	68.1
18	67.4	67.3	67.3	67.3	67.2	67.2	67.2	67.2	67.2
19	66.4	66.4	66.3	66.3	66.3	66.3	66.2	66.2	66.2
20	65.4	65.4	65.4	65.3	65.3	65.3	65.3	65.2	65.2
21	64.5	64.5	64.4	64.4	64.4	64.3	64.3	64.3	64.3
22	63.6	63.5	63.5	63.4	63.4	63.4	63.3	63.3	63.3
23	62.6	62.6	62.5	62.5	62.5	62.4	62.4	62.4	62.3
24	61.7	61.6	61.6	61.5	61.5	61.5	61.4	61.4	61.4
25	60.7	60.7	60.6	60.6	60.6	60.5	60.5	60.5	60.4
26	59.8	59.8	59.7	59.7	59.6	59.6	59.5	59.5	59.5
27	58.9	58.8	58.8	58.7	58.7	58.6	58.6	58.6	58.5
28	58.0	57.9	57.9	57.8	57.7	57.7	57.7	57.6	57.6
29	57.1	57.0	56.9	56.9	56.8	56.8	56.7	56.7	56.6
30	56.2	56.1	56.0	56.0	55.9	55.8	55.8	55.7	55.7
31	55.3	55.2	55.1	55.0	55.0	54.9	54.9	54.8	54.8
32	54.4	54.3	54.2	54.1	54.1	54.0	53.9	53.9	53.8
33	53.5	53.4	53.3	53.2	53.2	53.1	53.0	53.0	52.9
34	52.6	52.5	52.4	52.3	52.3	52.2	52.1	52.1	52.0
35	51.8	51.7	51.6	51.5	51.4	51.3	51.2	51.1	51.1
36	50.9	50.8	50.7	50.6	50.5	50.4	50.3	50.2	50.2
37	50.1	49.9	49.8	49.7	49.6	49.5	49.4	49.3	49.3
38	49.2	49.1	48.9	48.8	48.7	48.6	48.5	48.4	48.4
39	48.4	48.2	48.1	48.0	47.8	47.7	47.6	47.5	47.5
40	47.6	47.4	47.3	47.1	47.0	46.9	46.8	46.7	46.6
41	46.8	46.6	46.4	46.3	46.1	46.0	45.9	45.8	45.7
42	46.0	45.8	45.6	45.5	45.3	45.2	45.0	44.9	44.8
43	45.3	45.0	44.8	44.7	44.5	44.3	44.2	44.1	43.9
44	44.5	44.3	44.1	43.9	43.7	43.5	43.4	43.2	43.1
45	43.8	43.5	43.3	43.1	42.9	42.7	42.5	42.4	42.2
46	43.1	42.8	42.5	42.3	42.1	41.9	41.7	41.6	41.4
47	42.4	42.1	41.8	41.6	41.3	41.1	40.9	40.7	40.6
48	41.7	41.4	41.1	40.8	40.6	40.4	40.1	40.0	39.8
49	41.1	40.8	40.4	40.1	39.9	39.6	39.4	39.2	39.0
50	40.5	40.1	39.8	39.5	39.2	38.9	38.6	38.4	38.2
51	39.9	39.5	39.1	38.8	38.5	38.2	37.9	37.7	37.5
52	39.3	38.9	38.5	38.2	37.8	37.5	37.2	37.0	36.7
53	38.8	38.4	38.0	37.6	37.2	36.9	36.6	36.3	36.0
54	38.3	37.9	37.4	37.0	36.6	36.2	35.9	35.6	35.3
55	37.9	37.4	36.9	36.4	36.0	35.6	35.3	34.9	34.6
56	37.4	36.9	36.4	35.9	35.5	35.1	34.7	34.3	34.0
57	37.0	36.4	35.9	35.4	35.0	34.5	34.1	33.7	33.4
58	36.6	36.0	35.5	35.0	34.5	34.0	33.6	33.2	32.8
59	36.2	35.6	35.1	34.5	34.0	33.5	33.1	32.6	32.2
60	35.9	35.3	34.7	34.1	33.6	33.1	32.6	32.1	31.7
61	35.6	34.9	34.3	33.7	33.2	32.6	32.1	31.6	31.2
62	35.3	34.6	34.0	33.4	32.8	32.2	31.7	31.2	30.7
63	35.0	34.4	33.7	33.0	32.4	31.8	31.3	30.7	30.2
64	34.8	34.1	33.4	32.7	32.1	31.5	30.9	30.3	29.8
65	34.6	33.8	33.1	32.5	31.8	31.2	30.5	30.0	29.4
66	34.4	33.6	32.9	32.2	31.5	30.9	30.2	29.6	29.0
67	34.2	33.4	32.7	32.0	31.3	30.6	29.9	29.3	28.7
68	34.0	33.2	32.5	31.7	31.0	30.3	29.6	29.0	28.4
69	33.8	33.1	32.3	31.5	30.8	30.1	29.4	28.7	28.1
70	33.7	32.9	32.1	31.3	30.6	29.9	29.1	28.5	27.8
71	33.6	32.7	32.0	31.2	30.4	29.7	28.9	28.2	27.5
72	33.4	32.6	31.8	31.0	30.2	29.5	28.7	28.0	27.3
73	33.3	32.5	31.7	30.9	30.1	29.3	28.6	27.8	27.1
74	33.2	32.4	31.6	30.7	29.9	29.2	28.4	27.6	26.9
75	33.1	32.3	31.5	30.6	29.8	29.0	28.2	27.5	26.7

Ages	54	55	56	57	58	59	60	61	62
76	33.1	32.2	31.4	30.5	29.7	28.9	28.1	27.3	26.6
77	33.0	32.1	31.3	30.4	29.6	28.8	28.0	27.2	26.4
78	32.9	32.0	31.2	30.3	29.5	28.7	27.9	27.1	26.3
79	32.9	32.0	31.1	30.3	29.4	28.6	27.8	27.0	26.2
80	32.8	31.9	31.1	30.2	29.3	28.5	27.7	26.9	26.1
81	32.7	31.9	31.0	30.1	29.3	28.4	27.6	26.8	26.0
82	32.7	31.8	30.9	30.1	29.2	28.4	27.5	26.7	25.9
83	32.7	31.8	30.9	30.0	29.2	28.3	27.5	26.7	25.8
84	32.6	31.7	30.9	30.0	29.1	28.3	27.4	26.6	25.8
85	32.6	31.7	30.8	29.9	29.1	28.2	27.4	26.5	25.7
86	32.6	31.7	30.8	29.9	29.0	28.2	27.3	26.5	25.7
87	32.6	31.7	30.8	29.9	29.0	28.2	27.3	26.5	25.6
88	32.5	31.6	30.7	29.9	29.0	28.1	27.3	26.4	25.6
89	32.5	31.6	30.7	29.8	29.0	28.1	27.2	26.4	25.5
90	32.5	31.6	30.7	29.8	28.9	28.1	27.2	26.4	25.5
91	32.5	31.6	30.7	29.8	28.9	28.1	27.2	26.3	25.5
92	32.5	31.6	30.7	29.8	28.9	28.0	27.2	26.3	25.5
93	32.5	31.6	30.7	29.8	28.9	28.0	27.2	26.3	25.5
94	32.5	31.6	30.7	29.8	28.9	28.0	27.1	26.3	25.4
95	32.5	31.5	30.6	29.8	28.9	28.0	27.1	26.3	25.4
96	32.4	31.5	30.6	29.7	28.9	28.0	27.1	26.3	25.4
97	32.4	31.5	30.6	29.7	28.9	28.0	27.1	26.3	25.4
98	32.4	31.5	30.6	29.7	28.8	28.0	27.1	26.2	25.4
99	32.4	31.5	30.6	29.7	28.8	28.0	27.1	26.2	25.4
100	32.4	31.5	30.6	29.7	28.8	28.0	27.1	26.2	25.4
101	32.4	31.5	30.6	29.7	28.8	28.0	27.1	26.2	25.4
102	32.4	31.5	30.6	29.7	28.8	28.0	27.1	26.2	25.4
103	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
104	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
105	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
106	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
107	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
108	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
109	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
110	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
111	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
112	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
113	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
114	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
115	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.4
116	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.3
117	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.3
118	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.3
119	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.3
120+	32.4	31.5	30.6	29.7	28.8	27.9	27.1	26.2	25.3

Ages	63	64	65	66	67	68	69	70	71
0	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
1	83.8	83.8	83.8	83.7	83.7	83.7	83.7	83.7	83.7
2	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
3	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
4	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
5	79.9	79.9	79.8	79.8	79.8	79.8	79.8	79.8	79.8
6	78.9	78.9	78.9	78.9	78.8	78.8	78.8	78.8	78.8
7	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.8	77.8
8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
10	75.0	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
11	74.0	74.0	73.9	73.9	73.9	73.9	73.9	73.9	73.9
12	73.0	73.0	73.0	73.0	72.9	72.9	72.9	72.9	72.9
13	72.0	72.0	72.0	72.0	72.0	72.0	71.9	71.9	71.9
14	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	70.9
15	70.1	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
16	69.1	69.1	69.1	69.0	69.0	69.0	69.0	69.0	69.0
17	68.1	68.1	68.1	68.1	68.1	68.0	68.0	68.0	68.0
18	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.0	67.0
19	66.2	66.2	66.1	66.1	66.1	66.1	66.1	66.1	66.1
20	65.2	65.2	65.2	65.2	65.1	65.1	65.1	65.1	65.1
21	64.2	64.2	64.2	64.2	64.2	64.2	64.1	64.1	64.1
22	63.3	63.3	63.2	63.2	63.2	63.2	63.2	63.2	63.1
23	62.3	62.3	62.3	62.2	62.2	62.2	62.2	62.2	62.2
24	61.4	61.3	61.3	61.3	61.3	61.3	61.2	61.2	61.2

Ages	63	64	65	66	67	68	69	70	71
25	60.4	60.4	60.3	60.3	60.3	60.3	60.3	60.3	60.2
26	59.4	59.4	59.4	59.4	59.3	59.3	59.3	59.3	59.3
27	58.5	58.5	58.4	58.4	58.4	58.4	58.4	58.3	58.3
28	57.5	57.5	57.5	57.5	57.4	57.4	57.4	57.4	57.4
29	56.6	56.6	56.5	56.5	56.5	56.5	56.4	56.4	56.4
30	55.7	55.6	55.6	55.6	55.5	55.5	55.5	55.5	55.5
31	54.7	54.7	54.7	54.6	54.6	54.6	54.5	54.5	54.5
32	53.8	53.8	53.7	53.7	53.7	53.6	53.6	53.6	53.6
33	52.9	52.8	52.8	52.7	52.7	52.7	52.7	52.6	52.6
34	51.9	51.9	51.9	51.8	51.8	51.7	51.7	51.7	51.7
35	51.0	51.0	50.9	50.9	50.8	50.8	50.8	50.7	50.7
36	50.1	50.0	50.0	50.0	49.9	49.9	49.8	49.8	49.8
37	49.2	49.1	49.1	49.0	49.0	48.9	48.9	48.9	48.8
38	48.3	48.2	48.2	48.1	48.0	48.0	48.0	47.9	47.9
39	47.4	47.3	47.2	47.2	47.1	47.1	47.0	47.0	47.0
40	46.5	46.4	46.3	46.3	46.2	46.2	46.1	46.1	46.0
41	45.6	45.5	45.4	45.4	45.3	45.2	45.2	45.1	45.1
42	44.7	44.6	44.5	44.5	44.4	44.3	44.3	44.2	44.2
43	43.8	43.7	43.6	43.6	43.5	43.4	43.3	43.3	43.2
44	43.0	42.9	42.8	42.7	42.6	42.5	42.4	42.4	42.3
45	42.1	42.0	41.9	41.8	41.7	41.6	41.5	41.5	41.4
46	41.3	41.1	41.0	40.9	40.8	40.7	40.6	40.6	40.5
47	40.4	40.3	40.2	40.0	39.9	39.8	39.8	39.7	39.6
48	39.6	39.5	39.3	39.2	39.1	39.0	38.9	38.8	38.7
49	38.8	38.6	38.5	38.4	38.2	38.1	38.0	37.9	37.8
50	38.0	37.8	37.7	37.5	37.4	37.3	37.1	37.0	36.9
51	37.2	37.0	36.9	36.7	36.6	36.4	36.3	36.2	36.1
52	36.5	36.3	36.1	35.9	35.7	35.6	35.5	35.3	35.2
53	35.8	35.5	35.3	35.1	35.0	34.8	34.6	34.5	34.4
54	35.0	34.8	34.6	34.4	34.2	34.0	33.8	33.7	33.6
55	34.4	34.1	33.8	33.6	33.4	33.2	33.1	32.9	32.7
56	33.7	33.4	33.1	32.9	32.7	32.5	32.3	32.1	32.0
57	33.0	32.7	32.5	32.2	32.0	31.7	31.5	31.3	31.2
58	32.4	32.1	31.8	31.5	31.3	31.0	30.8	30.6	30.4
59	31.8	31.5	31.2	30.9	30.6	30.3	30.1	29.9	29.7
60	31.3	30.9	30.5	30.2	29.9	29.6	29.4	29.1	28.9
61	30.7	30.3	30.0	29.6	29.3	29.0	28.7	28.5	28.2
62	30.2	29.8	29.4	29.0	28.7	28.4	28.1	27.8	27.5
63	29.8	29.3	28.9	28.5	28.1	27.8	27.4	27.1	26.9
64	29.3	28.8	28.4	28.0	27.6	27.2	26.8	26.5	26.2
65	28.9	28.4	27.9	27.4	27.0	26.6	26.3	25.9	25.6
66	28.5	28.0	27.4	27.0	26.5	26.1	25.7	25.4	25.0
67	28.1	27.6	27.0	26.5	26.1	25.6	25.2	24.8	24.4
68	27.8	27.2	26.6	26.1	25.6	25.1	24.7	24.3	23.9
69	27.4	26.8	26.3	25.7	25.2	24.7	24.2	23.8	23.4
70	27.1	26.5	25.9	25.4	24.8	24.3	23.8	23.3	22.9
71	26.9	26.2	25.6	25.0	24.4	23.9	23.4	22.9	22.4
72	26.6	26.0	25.3	24.7	24.1	23.5	23.0	22.5	22.0
73	26.4	25.7	25.0	24.4	23.8	23.2	22.6	22.1	21.6
74	26.2	25.5	24.8	24.1	23.5	22.9	22.3	21.7	21.2
75	26.0	25.3	24.6	23.9	23.2	22.6	22.0	21.4	20.8
76	25.8	25.1	24.4	23.7	23.0	22.4	21.7	21.1	20.5
77	25.7	24.9	24.2	23.5	22.8	22.1	21.5	20.8	20.2
78	25.5	24.8	24.0	23.3	22.6	21.9	21.2	20.6	20.0
79	25.4	24.6	23.9	23.2	22.4	21.7	21.0	20.4	19.7
80	25.3	24.5	23.8	23.0	22.3	21.6	20.9	20.2	19.5
81	25.2	24.4	23.6	22.9	22.1	21.4	20.7	20.0	19.3
82	25.1	24.3	23.5	22.8	22.0	21.3	20.5	19.8	19.1
83	25.0	24.2	23.4	22.7	21.9	21.2	20.4	19.7	19.0
84	25.0	24.2	23.4	22.6	21.8	21.0	20.3	19.6	18.8
85	24.9	24.1	23.3	22.5	21.7	21.0	20.2	19.4	18.7
86	24.8	24.0	23.2	22.4	21.7	20.9	20.1	19.3	18.6
87	24.8	24.0	23.2	22.4	21.6	20.8	20.0	19.3	18.5
88	24.8	23.9	23.1	22.3	21.5	20.7	20.0	19.2	18.4
89	24.7	23.9	23.1	22.3	21.5	20.7	19.9	19.1	18.4
90	24.7	23.9	23.0	22.2	21.4	20.6	19.9	19.1	18.3
91	24.7	23.8	23.0	22.2	21.4	20.6	19.8	19.0	18.3
92	24.6	23.8	23.0	22.2	21.4	20.6	19.8	19.0	18.2
93	24.6	23.8	23.0	22.2	21.3	20.5	19.7	18.9	18.2
94	24.6	23.8	22.9	22.1	21.3	20.5	19.7	18.9	18.1
95	24.6	23.8	22.9	22.1	21.3	20.5	19.7	18.9	18.1
96	24.6	23.7	22.9	22.1	21.3	20.5	19.7	18.9	18.1
97	24.6	23.7	22.9	22.1	21.3	20.5	19.7	18.9	18.1
98	24.6	23.7	22.9	22.1	21.3	20.4	19.6	18.8	18.0

Ages	63	64	65	66	67	68	69	70	71
99	24.5	23.7	22.9	22.1	21.2	20.4	19.6	18.8	18.0
100	24.5	23.7	22.9	22.1	21.2	20.4	19.6	18.8	18.0
101	24.5	23.7	22.9	22.0	21.2	20.4	19.6	18.8	18.0
102	24.5	23.7	22.9	22.0	21.2	20.4	19.6	18.8	18.0
103	24.5	23.7	22.9	22.0	21.2	20.4	19.6	18.8	18.0
104	24.5	23.7	22.9	22.0	21.2	20.4	19.6	18.8	18.0
105	24.5	23.7	22.9	22.0	21.2	20.4	19.6	18.8	18.0
106	24.5	23.7	22.9	22.0	21.2	20.4	19.6	18.8	18.0
107	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
108	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
109	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
110	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
111	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
112	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
113	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
114	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
115	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
116	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.8	18.0
117	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.7	17.9
118	24.5	23.7	22.8	22.0	21.2	20.4	19.6	18.7	17.9
119	24.5	23.6	22.8	22.0	21.2	20.4	19.5	18.7	17.9
120+	24.5	23.6	22.8	22.0	21.2	20.4	19.5	18.7	17.9

Ages	72	73	74	75	76	77	78	79	80
0	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
1	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
2	82.8	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
3	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
4	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
5	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
7	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
8	76.9	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
9	75.9	75.9	75.9	75.9	75.8	75.8	75.8	75.8	75.8
10	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.8	74.8
11	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
12	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
13	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
14	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
15	70.0	70.0	69.9	69.9	69.9	69.9	69.9	69.9	69.9
16	69.0	69.0	69.0	69.0	68.9	68.9	68.9	68.9	68.9
17	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	67.9
18	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
19	66.1	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
20	65.1	65.1	65.1	65.0	65.0	65.0	65.0	65.0	65.0
21	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.0	64.0
22	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
23	62.2	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
24	61.2	61.2	61.2	61.2	61.2	61.1	61.1	61.1	61.1
25	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
26	59.3	59.3	59.2	59.2	59.2	59.2	59.2	59.2	59.2
27	58.3	58.3	58.3	58.3	58.3	58.2	58.2	58.2	58.2
28	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
29	56.4	56.4	56.4	56.3	56.3	56.3	56.3	56.3	56.3
30	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.3
31	54.5	54.5	54.5	54.4	54.4	54.4	54.4	54.4	54.4
32	53.5	53.5	53.5	53.5	53.5	53.5	53.4	53.4	53.4
33	52.6	52.6	52.5	52.5	52.5	52.5	52.5	52.5	52.5
34	51.6	51.6	51.6	51.6	51.6	51.6	51.5	51.5	51.5
35	50.7	50.7	50.6	50.6	50.6	50.6	50.6	50.6	50.6
36	49.7	49.7	49.7	49.7	49.7	49.6	49.6	49.6	49.6
37	48.8	48.8	48.8	48.7	48.7	48.7	48.7	48.7	48.7
38	47.9	47.8	47.8	47.8	47.8	47.7	47.7	47.7	47.7
39	46.9	46.9	46.9	46.8	46.8	46.8	46.8	46.8	46.7
40	46.0	45.9	45.9	45.9	45.9	45.8	45.8	45.8	45.8
41	45.0	45.0	45.0	44.9	44.9	44.9	44.9	44.9	44.8
42	44.1	44.1	44.0	44.0	44.0	43.9	43.9	43.9	43.9
43	43.2	43.1	43.1	43.1	43.0	43.0	43.0	43.0	42.9
44	42.3	42.2	42.2	42.1	42.1	42.1	42.0	42.0	42.0
45	41.3	41.3	41.2	41.2	41.2	41.1	41.1	41.1	41.1
46	40.4	40.4	40.3	40.3	40.2	40.2	40.2	40.1	40.1
47	39.5	39.5	39.4	39.4	39.3	39.3	39.2	39.2	39.2

Ages	72	73	74	75	76	77	78	79	80
48	38.6	38.6	38.5	38.4	38.4	38.4	38.3	38.3	38.2
49	37.7	37.7	37.6	37.5	37.5	37.4	37.4	37.4	37.3
50	36.9	36.8	36.7	36.6	36.6	36.5	36.5	36.4	36.4
51	36.0	35.9	35.8	35.7	35.7	35.6	35.6	35.5	35.5
52	35.1	35.0	34.9	34.9	34.8	34.7	34.7	34.6	34.6
53	34.3	34.2	34.1	34.0	33.9	33.9	33.8	33.7	33.7
54	33.4	33.3	33.2	33.1	33.1	33.0	32.9	32.9	32.8
55	32.6	32.5	32.4	32.3	32.2	32.1	32.0	32.0	31.9
56	31.8	31.7	31.6	31.5	31.4	31.3	31.2	31.1	31.1
57	31.0	30.9	30.7	30.6	30.5	30.4	30.3	30.3	30.2
58	30.2	30.1	29.9	29.8	29.7	29.6	29.5	29.4	29.3
59	29.5	29.3	29.2	29.0	28.9	28.8	28.7	28.6	28.5
60	28.7	28.6	28.4	28.2	28.1	28.0	27.9	27.8	27.7
61	28.0	27.8	27.6	27.5	27.3	27.2	27.1	27.0	26.9
62	27.3	27.1	26.9	26.7	26.6	26.4	26.3	26.2	26.1
63	26.6	26.4	26.2	26.0	25.8	25.7	25.5	25.4	25.3
64	26.0	25.7	25.5	25.3	25.1	24.9	24.8	24.6	24.5
65	25.3	25.0	24.8	24.6	24.4	24.2	24.0	23.9	23.8
66	24.7	24.4	24.1	23.9	23.7	23.5	23.3	23.2	23.0
67	24.1	23.8	23.5	23.2	23.0	22.8	22.6	22.4	22.3
68	23.5	23.2	22.9	22.6	22.4	22.1	21.9	21.7	21.6
69	23.0	22.6	22.3	22.0	21.7	21.5	21.2	21.0	20.9
70	22.5	22.1	21.7	21.4	21.1	20.8	20.6	20.4	20.2
71	22.0	21.6	21.2	20.8	20.5	20.2	20.0	19.7	19.5
72	21.5	21.1	20.7	20.3	20.0	19.6	19.4	19.1	18.9
73	21.1	20.6	20.2	19.8	19.4	19.1	18.8	18.5	18.2
74	20.7	20.2	19.7	19.3	18.9	18.6	18.2	17.9	17.6
75	20.3	19.8	19.3	18.9	18.5	18.1	17.7	17.4	17.1
76	20.0	19.4	18.9	18.5	18.0	17.6	17.2	16.9	16.5
77	19.6	19.1	18.6	18.1	17.6	17.2	16.8	16.4	16.0
78	19.4	18.8	18.2	17.7	17.2	16.8	16.3	15.9	15.6
79	19.1	18.5	17.9	17.4	16.9	16.4	15.9	15.5	15.1
80	18.9	18.2	17.6	17.1	16.5	16.0	15.6	15.1	14.7
81	18.6	18.0	17.4	16.8	16.2	15.7	15.2	14.7	14.3
82	18.4	17.8	17.2	16.6	16.0	15.4	14.9	14.4	14.0
83	18.3	17.6	17.0	16.3	15.7	15.2	14.6	14.1	13.6
84	18.1	17.4	16.8	16.1	15.5	14.9	14.4	13.8	13.3
85	18.0	17.3	16.6	16.0	15.3	14.7	14.1	13.6	13.1
86	17.9	17.2	16.5	15.8	15.2	14.5	13.9	13.4	12.8
87	17.8	17.1	16.4	15.7	15.0	14.4	13.8	13.2	12.6
88	17.7	17.0	16.2	15.6	14.9	14.2	13.6	13.0	12.4
89	17.6	16.9	16.2	15.4	14.8	14.1	13.5	12.9	12.3
90	17.5	16.8	16.1	15.4	14.7	14.0	13.4	12.7	12.1
91	17.5	16.7	16.0	15.3	14.6	13.9	13.2	12.6	12.0
92	17.4	16.7	15.9	15.2	14.5	13.8	13.2	12.5	11.9
93	17.4	16.6	15.9	15.2	14.4	13.7	13.1	12.4	11.8
94	17.4	16.6	15.8	15.1	14.4	13.7	13.0	12.4	11.7
95	17.3	16.6	15.8	15.1	14.3	13.6	12.9	12.3	11.6
96	17.3	16.5	15.8	15.0	14.3	13.6	12.9	12.2	11.6
97	17.3	16.5	15.7	15.0	14.3	13.5	12.9	12.2	11.5
98	17.3	16.5	15.7	15.0	14.2	13.5	12.8	12.1	11.5
99	17.2	16.5	15.7	14.9	14.2	13.5	12.8	12.1	11.4
100	17.2	16.4	15.7	14.9	14.2	13.5	12.8	12.1	11.4
101	17.2	16.4	15.7	14.9	14.2	13.4	12.7	12.0	11.4
102	17.2	16.4	15.7	14.9	14.2	13.4	12.7	12.0	11.4
103	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
104	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
105	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
106	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
107	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
108	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
109	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
110	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
111	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
112	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
113	17.2	16.4	15.6	14.9	14.1	13.4	12.7	12.0	11.3
114	17.2	16.4	15.6	14.8	14.1	13.4	12.6	12.0	11.3
115	17.2	16.4	15.6	14.8	14.1	13.4	12.6	11.9	11.3
116	17.2	16.4	15.6	14.8	14.1	13.3	12.6	11.9	11.3
117	17.1	16.4	15.6	14.8	14.1	13.3	12.6	11.9	11.2
118	17.1	16.4	15.6	14.8	14.1	13.3	12.6	11.9	11.2
119	17.1	16.3	15.6	14.8	14.0	13.3	12.6	11.9	11.2
120+	17.1	16.3	15.6	14.8	14.0	13.3	12.6	11.9	11.2

Ages	81	82	83	84	85	86	87	88	89
0	84.6	84.6	84.6	84.6	84.6	84.5	84.5	84.5	84.5
1	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
2	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
3	81.8	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
4	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
5	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
7	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
9	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
10	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
11	73.9	73.9	73.9	73.9	73.8	73.8	73.8	73.8	73.8
12	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
13	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
14	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
15	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
16	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
17	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
18	67.0	67.0	67.0	67.0	67.0	67.0	66.9	66.9	66.9
19	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
20	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
21	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
22	63.1	63.1	63.0	63.0	63.0	63.0	63.0	63.0	63.0
23	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
24	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
25	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
26	59.2	59.2	59.2	59.2	59.2	59.2	59.1	59.1	59.1
27	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
28	57.3	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
29	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
30	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
31	54.4	54.4	54.4	54.4	54.4	54.3	54.3	54.3	54.3
32	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
33	52.5	52.5	52.5	52.4	52.4	52.4	52.4	52.4	52.4
34	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
35	50.6	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
36	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
37	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
38	47.7	47.7	47.7	47.7	47.7	47.6	47.6	47.6	47.6
39	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
40	45.8	45.8	45.8	45.7	45.7	45.7	45.7	45.7	45.7
41	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
42	43.9	43.9	43.8	43.8	43.8	43.8	43.8	43.8	43.8
43	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.8	42.8
44	42.0	42.0	41.9	41.9	41.9	41.9	41.9	41.9	41.9
45	41.0	41.0	41.0	41.0	41.0	41.0	40.9	40.9	40.9
46	40.1	40.1	40.0	40.0	40.0	40.0	40.0	40.0	40.0
47	39.1	39.1	39.1	39.1	39.1	39.1	39.0	39.0	39.0
48	38.2	38.2	38.2	38.1	38.1	38.1	38.1	38.1	38.1
49	37.3	37.3	37.2	37.2	37.2	37.2	37.2	37.1	37.1
50	36.4	36.3	36.3	36.3	36.3	36.2	36.2	36.2	36.2
51	35.4	35.4	35.4	35.4	35.3	35.3	35.3	35.3	35.3
52	34.5	34.5	34.5	34.4	34.4	34.4	34.4	34.4	34.3
53	33.6	33.6	33.6	33.5	33.5	33.5	33.5	33.4	33.4
54	32.7	32.7	32.7	32.6	32.6	32.6	32.6	32.5	32.5
55	31.9	31.8	31.8	31.7	31.7	31.7	31.7	31.6	31.6
56	31.0	30.9	30.9	30.9	30.8	30.8	30.8	30.7	30.7
57	30.1	30.1	30.0	30.0	29.9	29.9	29.9	29.9	29.8
58	29.3	29.2	29.2	29.1	29.1	29.0	29.0	29.0	29.0
59	28.4	28.4	28.3	28.3	28.2	28.2	28.2	28.1	28.1
60	27.6	27.5	27.5	27.4	27.4	27.3	27.3	27.3	27.2
61	26.8	26.7	26.7	26.6	26.5	26.5	26.5	26.4	26.4
62	26.0	25.9	25.8	25.8	25.7	25.7	25.6	25.6	25.5
63	25.2	25.1	25.0	25.0	24.9	24.8	24.8	24.8	24.7
64	24.4	24.3	24.2	24.2	24.1	24.0	24.0	23.9	23.9
65	23.6	23.5	23.4	23.4	23.3	23.2	23.2	23.1	23.1
66	22.9	22.8	22.7	22.6	22.5	22.4	22.4	22.3	22.3
67	22.1	22.0	21.9	21.8	21.7	21.7	21.6	21.5	21.5
68	21.4	21.3	21.2	21.0	21.0	20.9	20.8	20.7	20.7
69	20.7	20.5	20.4	20.3	20.2	20.1	20.0	20.0	19.9
70	20.0	19.8	19.7	19.6	19.4	19.3	19.3	19.2	19.1
71	19.3	19.1	19.0	18.8	18.7	18.6	18.5	18.4	18.4
72	18.6	18.4	18.3	18.1	18.0	17.9	17.8	17.7	17.6
73	18.0	17.8	17.6	17.4	17.3	17.2	17.1	17.0	16.9

Ages	81	82	83	84	85	86	87	88	89
74	17.4	17.2	17.0	16.8	16.6	16.5	16.4	16.2	16.2
75	16.8	16.6	16.3	16.1	16.0	15.8	15.7	15.6	15.4
76	16.2	16.0	15.7	15.5	15.3	15.2	15.0	14.9	14.8
77	15.7	15.4	15.2	14.9	14.7	14.5	14.4	14.2	14.1
78	15.2	14.9	14.6	14.4	14.1	13.9	13.8	13.6	13.5
79	14.7	14.4	14.1	13.8	13.6	13.4	13.2	13.0	12.9
80	14.3	14.0	13.6	13.3	13.1	12.8	12.6	12.4	12.3
81	13.9	13.5	13.2	12.9	12.6	12.3	12.1	11.9	11.7
82	13.5	13.1	12.8	12.4	12.1	11.9	11.6	11.4	11.2
83	13.2	12.8	12.4	12.0	11.7	11.4	11.2	10.9	10.7
84	12.9	12.4	12.0	11.7	11.3	11.0	10.7	10.5	10.3
85	12.6	12.1	11.7	11.3	11.0	10.7	10.4	10.1	9.9
86	12.3	11.9	11.4	11.0	10.7	10.3	10.0	9.7	9.5
87	12.1	11.6	11.2	10.7	10.4	10.0	9.7	9.4	9.1
88	11.9	11.4	10.9	10.5	10.1	9.7	9.4	9.1	8.8
89	11.7	11.2	10.7	10.3	9.9	9.5	9.1	8.8	8.5
90	11.6	11.0	10.5	10.1	9.6	9.2	8.9	8.5	8.2
91	11.4	10.9	10.4	9.9	9.5	9.0	8.7	8.3	8.0
92	11.3	10.8	10.2	9.7	9.3	8.9	8.5	8.1	7.8
93	11.2	10.6	10.1	9.6	9.1	8.7	8.3	7.9	7.6
94	11.1	10.5	10.0	9.5	9.0	8.6	8.1	7.7	7.4
95	11.0	10.5	9.9	9.4	8.9	8.4	8.0	7.6	7.2
96	11.0	10.4	9.8	9.3	8.8	8.3	7.9	7.5	7.1
97	10.9	10.3	9.7	9.2	8.7	8.2	7.8	7.4	7.0
98	10.9	10.3	9.7	9.1	8.6	8.1	7.7	7.3	6.9
99	10.8	10.2	9.6	9.1	8.6	8.1	7.6	7.2	6.8
100	10.8	10.2	9.6	9.0	8.5	8.0	7.6	7.1	6.7
101	10.7	10.1	9.5	9.0	8.5	8.0	7.5	7.1	6.7
102	10.7	10.1	9.5	8.9	8.4	7.9	7.4	7.0	6.6
103	10.7	10.1	9.5	8.9	8.4	7.9	7.4	7.0	6.6
104	10.7	10.1	9.5	8.9	8.4	7.9	7.4	6.9	6.5
105	10.7	10.0	9.5	8.9	8.3	7.8	7.4	6.9	6.5
106	10.7	10.0	9.4	8.9	8.3	7.8	7.4	6.9	6.5
107	10.7	10.0	9.4	8.9	8.3	7.8	7.3	6.9	6.5
108	10.7	10.0	9.4	8.9	8.3	7.8	7.3	6.9	6.5
109	10.7	10.0	9.4	8.9	8.3	7.8	7.3	6.9	6.5
110	10.7	10.0	9.4	8.9	8.3	7.8	7.3	6.9	6.5
111	10.6	10.0	9.4	8.8	8.3	7.8	7.3	6.9	6.4
112	10.6	10.0	9.4	8.8	8.3	7.8	7.3	6.9	6.4
113	10.6	10.0	9.4	8.8	8.3	7.8	7.3	6.8	6.4
114	10.6	10.0	9.4	8.8	8.3	7.8	7.3	6.8	6.4
115	10.6	10.0	9.4	8.8	8.3	7.7	7.3	6.8	6.4
116	10.6	10.0	9.4	8.8	8.2	7.7	7.2	6.8	6.3
117	10.6	9.9	9.3	8.7	8.2	7.7	7.2	6.7	6.3
118	10.5	9.9	9.3	8.7	8.2	7.6	7.1	6.7	6.2
119	10.5	9.9	9.3	8.7	8.1	7.6	7.1	6.6	6.2
120+	10.5	9.9	9.2	8.6	8.1	7.5	7.0	6.6	6.1

Ages	90	91	92	93	94	95	96	97	98
0	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
1	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
2	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
3	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
4	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
5	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
7	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
9	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
10	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
11	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
12	72.9	72.9	72.9	72.8	72.8	72.8	72.8	72.8	72.8
13	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
14	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
15	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
16	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
17	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
18	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
19	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
20	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
21	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
22	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0

Ages	90	91	92	93	94	95	96	97	98
23	62.1	62.1	62.0	62.0	62.0	62.0	62.0	62.0	62.0
24	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
25	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
26	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
27	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
28	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
29	56.3	56.3	56.2	56.2	56.2	56.2	56.2	56.2	56.2
30	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
31	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
32	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
33	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
34	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
35	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
36	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
37	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
38	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6
39	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
40	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
41	44.8	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
42	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
43	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
44	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
45	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
46	40.0	40.0	40.0	40.0	40.0	40.0	39.9	39.9	39.9
47	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
48	38.1	38.1	38.1	38.1	38.1	38.0	38.0	38.0	38.0
49	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1
50	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.1
51	35.3	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
52	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
53	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4
54	32.5	32.5	32.5	32.5	32.5	32.5	32.4	32.4	32.4
55	31.6	31.6	31.6	31.6	31.6	31.5	31.5	31.5	31.5
56	30.7	30.7	30.7	30.7	30.7	30.6	30.6	30.6	30.6
57	29.8	29.8	29.8	29.8	29.8	29.8	29.7	29.7	29.7
58	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.8
59	28.1	28.1	28.0	28.0	28.0	28.0	28.0	28.0	28.0
60	27.2	27.2	27.2	27.2	27.1	27.1	27.1	27.1	27.1
61	26.4	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.2
62	25.5	25.5	25.5	25.5	25.4	25.4	25.4	25.4	25.4
63	24.7	24.7	24.6	24.6	24.6	24.6	24.6	24.6	24.6
64	23.9	23.8	23.8	23.8	23.8	23.8	23.7	23.7	23.7
65	23.0	23.0	23.0	23.0	22.9	22.9	22.9	22.9	22.9
66	22.2	22.2	22.2	22.2	22.1	22.1	22.1	22.1	22.1
67	21.4	21.4	21.4	21.3	21.3	21.3	21.3	21.3	21.3
68	20.6	20.6	20.6	20.5	20.5	20.5	20.5	20.5	20.4
69	19.9	19.8	19.8	19.7	19.7	19.7	19.7	19.7	19.6
70	19.1	19.0	19.0	18.9	18.9	18.9	18.9	18.9	18.8
71	18.3	18.3	18.2	18.2	18.1	18.1	18.1	18.1	18.0
72	17.5	17.5	17.4	17.4	17.4	17.3	17.3	17.3	17.3
73	16.8	16.7	16.7	16.6	16.6	16.6	16.5	16.5	16.5
74	16.1	16.0	15.9	15.9	15.8	15.8	15.8	15.7	15.7
75	15.4	15.3	15.2	15.2	15.1	15.1	15.0	15.0	15.0
76	14.7	14.6	14.5	14.4	14.4	14.3	14.3	14.3	14.2
77	14.0	13.9	13.8	13.7	13.7	13.6	13.6	13.5	13.5
78	13.4	13.2	13.2	13.1	13.0	12.9	12.9	12.9	12.8
79	12.7	12.6	12.5	12.4	12.4	12.3	12.2	12.2	12.1
80	12.1	12.0	11.9	11.8	11.7	11.6	11.6	11.5	11.5
81	11.6	11.4	11.3	11.2	11.1	11.0	11.0	10.9	10.9
82	11.0	10.9	10.8	10.6	10.5	10.5	10.4	10.3	10.3
83	10.5	10.4	10.2	10.1	10.0	9.9	9.8	9.7	9.7
84	10.1	9.9	9.7	9.6	9.5	9.4	9.3	9.2	9.1
85	9.6	9.5	9.3	9.1	9.0	8.9	8.8	8.7	8.6
86	9.2	9.0	8.9	8.7	8.6	8.4	8.3	8.2	8.1
87	8.9	8.7	8.5	8.3	8.1	8.0	7.9	7.8	7.7
88	8.5	8.3	8.1	7.9	7.7	7.6	7.5	7.4	7.3
89	8.2	8.0	7.8	7.6	7.4	7.2	7.1	7.0	6.9
90	7.9	7.7	7.5	7.3	7.1	6.9	6.8	6.6	6.5
91	7.7	7.4	7.2	7.0	6.8	6.6	6.5	6.3	6.2
92	7.5	7.2	6.9	6.7	6.5	6.3	6.2	6.0	5.9
93	7.3	7.0	6.7	6.5	6.3	6.1	5.9	5.8	5.6
94	7.1	6.8	6.5	6.3	6.0	5.8	5.7	5.5	5.4
95	6.9	6.6	6.3	6.1	5.8	5.6	5.5	5.3	5.1
96	6.8	6.5	6.2	5.9	5.7	5.5	5.3	5.1	4.9

Ages	90	91	92	93	94	95	96	97	98
97	6.6	6.3	6.0	5.8	5.5	5.3	5.1	4.9	4.8
98	6.5	6.2	5.9	5.6	5.4	5.1	4.9	4.8	4.6
99	6.4	6.1	5.8	5.5	5.3	5.0	4.8	4.6	4.5
100	6.4	6.0	5.7	5.4	5.1	4.9	4.7	4.5	4.3
101	6.3	5.9	5.6	5.3	5.1	4.8	4.6	4.4	4.2
102	6.2	5.9	5.6	5.3	5.0	4.7	4.5	4.3	4.1
103	6.2	5.8	5.5	5.2	4.9	4.7	4.4	4.2	4.0
104	6.1	5.8	5.5	5.1	4.9	4.6	4.4	4.2	4.0
105	6.1	5.8	5.4	5.1	4.8	4.6	4.3	4.1	3.9
106	6.1	5.7	5.4	5.1	4.8	4.6	4.3	4.1	3.9
107	6.1	5.7	5.4	5.1	4.8	4.5	4.3	4.1	3.9
108	6.1	5.7	5.4	5.1	4.8	4.5	4.3	4.1	3.9
109	6.1	5.7	5.4	5.1	4.8	4.5	4.3	4.1	3.9
110	6.1	5.7	5.4	5.1	4.8	4.5	4.3	4.1	3.9
111	6.1	5.7	5.4	5.0	4.8	4.5	4.3	4.0	3.9
112	6.0	5.7	5.3	5.0	4.7	4.5	4.2	4.0	3.8
113	6.0	5.7	5.3	5.0	4.7	4.5	4.2	4.0	3.8
114	6.0	5.6	5.3	5.0	4.7	4.4	4.2	4.0	3.8
115	6.0	5.6	5.3	5.0	4.7	4.4	4.2	3.9	3.7
116	5.9	5.6	5.2	4.9	4.6	4.3	4.1	3.9	3.7
117	5.9	5.5	5.2	4.8	4.5	4.3	4.0	3.8	3.6
118	5.8	5.4	5.1	4.8	4.4	4.2	3.9	3.7	3.5
119	5.7	5.4	5.0	4.7	4.3	4.0	3.8	3.5	3.3
120+	5.7	5.3	4.9	4.6	4.2	3.9	3.7	3.4	3.2

Ages	99	100	101	102	103	104	105	106	107
0	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
1	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
2	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
3	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
4	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
5	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
7	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
9	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
10	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
11	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
12	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
13	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
14	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
15	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
16	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
17	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
18	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
19	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
20	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
21	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
22	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
23	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
24	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
25	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
26	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
27	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
28	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
29	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2
30	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
31	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
32	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
33	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
34	51.5	51.5	51.4	51.4	51.4	51.4	51.4	51.4	51.4
35	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
36	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
37	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
38	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6
39	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7	46.7
40	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
41	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
42	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
43	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
44	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
45	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9

Ages	99	100	101	102	103	104	105	106	107
46	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
47	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
48	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
49	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1
50	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
51	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
52	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
53	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
54	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
55	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
56	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
57	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
58	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
59	28.0	28.0	28.0	28.0	27.9	27.9	27.9	27.9	27.9
60	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
61	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
62	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
63	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
64	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
65	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.8
66	22.1	22.1	22.0	22.0	22.0	22.0	22.0	22.0	22.0
67	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
68	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
69	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
70	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
71	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
72	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
73	16.5	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
74	15.7	15.7	15.7	15.7	15.6	15.6	15.6	15.6	15.6
75	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
76	14.2	14.2	14.2	14.2	14.1	14.1	14.1	14.1	14.1
77	13.5	13.5	13.4	13.4	13.4	13.4	13.4	13.4	13.4
78	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7
79	12.1	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0
80	11.4	11.4	11.4	11.4	11.3	11.3	11.3	11.3	11.3
81	10.8	10.8	10.7	10.7	10.7	10.7	10.7	10.7	10.7
82	10.2	10.2	10.1	10.1	10.1	10.1	10.0	10.0	10.0
83	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	9.4
84	9.1	9.0	9.0	8.9	8.9	8.9	8.9	8.9	8.9
85	8.6	8.5	8.5	8.4	8.4	8.4	8.3	8.3	8.3
86	8.1	8.0	8.0	7.9	7.9	7.9	7.8	7.8	7.8
87	7.6	7.6	7.5	7.4	7.4	7.4	7.4	7.4	7.3
88	7.2	7.1	7.1	7.0	7.0	6.9	6.9	6.9	6.9
89	6.8	6.7	6.7	6.6	6.6	6.5	6.5	6.5	6.5
90	6.4	6.4	6.3	6.2	6.2	6.1	6.1	6.1	6.1
91	6.1	6.0	5.9	5.9	5.8	5.8	5.8	5.7	5.7
92	5.8	5.7	5.6	5.6	5.5	5.5	5.4	5.4	5.4
93	5.5	5.4	5.3	5.3	5.2	5.1	5.1	5.1	5.1
94	5.3	5.1	5.1	5.0	4.9	4.9	4.8	4.8	4.8
95	5.0	4.9	4.8	4.7	4.7	4.6	4.6	4.6	4.5
96	4.8	4.7	4.6	4.5	4.4	4.4	4.3	4.3	4.3
97	4.6	4.5	4.4	4.3	4.2	4.2	4.1	4.1	4.1
98	4.5	4.3	4.2	4.1	4.0	4.0	3.9	3.9	3.9
99	4.3	4.2	4.1	4.0	3.9	3.8	3.8	3.7	3.7
100	4.2	4.0	3.9	3.8	3.7	3.7	3.6	3.6	3.6
101	4.1	3.9	3.8	3.7	3.6	3.5	3.5	3.5	3.4
102	4.0	3.8	3.7	3.6	3.5	3.4	3.4	3.3	3.3
103	3.9	3.7	3.6	3.5	3.4	3.3	3.3	3.2	3.2
104	3.8	3.7	3.5	3.4	3.3	3.2	3.2	3.2	3.1
105	3.8	3.6	3.5	3.4	3.3	3.2	3.1	3.1	3.1
106	3.7	3.6	3.5	3.3	3.2	3.2	3.1	3.1	3.1
107	3.7	3.6	3.4	3.3	3.2	3.1	3.1	3.1	3.0
108	3.7	3.6	3.4	3.3	3.2	3.1	3.1	3.0	3.0
109	3.7	3.5	3.4	3.3	3.2	3.1	3.1	3.0	3.0
110	3.7	3.5	3.4	3.3	3.2	3.1	3.0	3.0	3.0
111	3.7	3.5	3.4	3.3	3.2	3.1	3.0	3.0	3.0
112	3.7	3.5	3.4	3.2	3.1	3.1	3.0	3.0	3.0
113	3.6	3.5	3.3	3.2	3.1	3.0	3.0	3.0	2.9
114	3.6	3.4	3.3	3.2	3.1	3.0	3.0	2.9	2.9
115	3.6	3.4	3.3	3.1	3.0	3.0	2.9	2.9	2.9
116	3.5	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.8
117	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.7
118	3.3	3.1	3.0	2.8	2.7	2.6	2.6	2.5	2.5
119	3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.3	2.3

Ages	99	100	101	102	103	104	105	106	107
120+	3.0	2.8	2.6	2.5	2.3	2.2	2.1	2.1	2.1

Ages	108	109	110	111	112	113	114	115	116
0	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
1	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
2	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
3	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
4	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
5	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
7	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
9	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
10	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
11	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
12	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
13	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
14	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
15	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
16	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
17	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
18	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
19	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
20	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
21	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
22	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
23	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
24	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
25	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
26	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
27	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
28	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
29	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2
30	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
31	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
32	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
33	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
34	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
35	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
36	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
37	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
38	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6
39	46.7	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
40	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
41	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
42	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
43	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
44	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.8
45	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
46	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.9
47	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
48	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
49	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1
50	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
51	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2
52	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
53	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
54	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
55	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
56	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
57	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
58	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
59	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
60	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
61	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
62	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.3
63	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
64	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
65	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
66	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
67	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
68	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4

Ages	108	109	110	111	112	113	114	115	116
69	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
70	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
71	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
72	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
73	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
74	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6
75	14.9	14.9	14.9	14.9	14.9	14.9	14.8	14.8	14.8
76	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
77	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.3
78	12.7	12.7	12.7	12.7	12.7	12.7	12.6	12.6	12.6
79	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.9	11.9
80	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
81	10.7	10.7	10.7	10.6	10.6	10.6	10.6	10.6	10.6
82	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
83	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
84	8.9	8.9	8.9	8.8	8.8	8.8	8.8	8.8	8.8
85	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.2
86	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7
87	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2
88	6.9	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.8
89	6.5	6.5	6.5	6.4	6.4	6.4	6.4	6.4	6.3
90	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.0	5.9
91	5.7	5.7	5.7	5.7	5.7	5.7	5.6	5.6	5.6
92	5.4	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.2
93	5.1	5.1	5.1	5.0	5.0	5.0	5.0	5.0	4.9
94	4.8	4.8	4.8	4.8	4.7	4.7	4.7	4.7	4.6
95	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.3
96	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	4.1
97	4.1	4.1	4.1	4.0	4.0	4.0	4.0	3.9	3.9
98	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.7	3.7
99	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.5
100	3.6	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.3
101	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.2
102	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.1	3.1
103	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.0	3.0
104	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	2.9
105	3.1	3.1	3.0	3.0	3.0	3.0	3.0	2.9	2.8
106	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.8
107	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.8
108	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.8
109	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.8	2.8
110	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.8	2.7
111	3.0	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.7
112	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.7
113	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.7	2.7
114	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.7	2.6
115	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.6
116	2.8	2.8	2.7	2.7	2.7	2.7	2.6	2.6	2.5
117	2.7	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.4
118	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.3	2.2
119	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.0
120+	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8

Ages	117	118	119	120+
0	84.5	84.5	84.5	84.5
1	83.7	83.7	83.7	83.7
2	82.7	82.7	82.7	82.7
3	81.7	81.7	81.7	81.7
4	80.8	80.8	80.8	80.8
5	79.8	79.8	79.8	79.8
6	78.8	78.8	78.8	78.8
7	77.8	77.8	77.8	77.8
8	76.8	76.8	76.8	76.8
9	75.8	75.8	75.8	75.8
10	74.8	74.8	74.8	74.8
11	73.8	73.8	73.8	73.8
12	72.8	72.8	72.8	72.8
13	71.9	71.9	71.9	71.9
14	70.9	70.9	70.9	70.9
15	69.9	69.9	69.9	69.9
16	68.9	68.9	68.9	68.9
17	67.9	67.9	67.9	67.9

Ages	117	118	119	120+
18	66.9	66.9	66.9	66.9
19	66.0	66.0	66.0	66.0
20	65.0	65.0	65.0	65.0
21	64.0	64.0	64.0	64.0
22	63.0	63.0	63.0	63.0
23	62.0	62.0	62.0	62.0
24	61.1	61.1	61.1	61.1
25	60.1	60.1	60.1	60.1
26	59.1	59.1	59.1	59.1
27	58.2	58.2	58.2	58.2
28	57.2	57.2	57.2	57.2
29	56.2	56.2	56.2	56.2
30	55.3	55.3	55.3	55.3
31	54.3	54.3	54.3	54.3
32	53.4	53.4	53.4	53.4
33	52.4	52.4	52.4	52.4
34	51.4	51.4	51.4	51.4
35	50.5	50.5	50.5	50.5
36	49.5	49.5	49.5	49.5
37	48.6	48.6	48.6	48.6
38	47.6	47.6	47.6	47.6
39	46.6	46.6	46.6	46.6
40	45.7	45.7	45.7	45.7
41	44.7	44.7	44.7	44.7
42	43.8	43.8	43.8	43.8
43	42.8	42.8	42.8	42.8
44	41.8	41.8	41.8	41.8
45	40.9	40.9	40.9	40.9
46	39.9	39.9	39.9	39.9
47	39.0	39.0	39.0	39.0
48	38.0	38.0	38.0	38.0
49	37.1	37.1	37.1	37.1
50	36.1	36.1	36.1	36.1
51	35.2	35.2	35.2	35.2
52	34.3	34.3	34.3	34.3
53	33.3	33.3	33.3	33.3
54	32.4	32.4	32.4	32.4
55	31.5	31.5	31.5	31.5
56	30.6	30.6	30.6	30.6
57	29.7	29.7	29.7	29.7
58	28.8	28.8	28.8	28.8
59	27.9	27.9	27.9	27.9
60	27.1	27.1	27.1	27.1
61	26.2	26.2	26.2	26.2
62	25.3	25.3	25.3	25.3
63	24.5	24.5	24.5	24.5
64	23.7	23.7	23.6	23.6
65	22.8	22.8	22.8	22.8
66	22.0	22.0	22.0	22.0
67	21.2	21.2	21.2	21.2
68	20.4	20.4	20.4	20.4
69	19.6	19.6	19.5	19.5
70	18.7	18.7	18.7	18.7
71	17.9	17.9	17.9	17.9
72	17.1	17.1	17.1	17.1
73	16.4	16.4	16.3	16.3
74	15.6	15.6	15.6	15.6
75	14.8	14.8	14.8	14.8
76	14.1	14.1	14.0	14.0
77	13.3	13.3	13.3	13.3
78	12.6	12.6	12.6	12.6
79	11.9	11.9	11.9	11.9
80	11.2	11.2	11.2	11.2
81	10.6	10.5	10.5	10.5
82	9.9	9.9	9.9	9.9
83	9.3	9.3	9.3	9.2
84	8.7	8.7	8.7	8.6
85	8.2	8.2	8.1	8.1
86	7.7	7.6	7.6	7.5
87	7.2	7.1	7.1	7.0
88	6.7	6.7	6.6	6.6
89	6.3	6.2	6.2	6.1
90	5.9	5.8	5.7	5.7
91	5.5	5.4	5.4	5.3

Ages	117	118	119	120+
92	5.2	5.1	5.0	4.9
93	4.8	4.8	4.7	4.6
94	4.5	4.4	4.3	4.2
95	4.3	4.2	4.0	3.9
96	4.0	3.9	3.8	3.7
97	3.8	3.7	3.5	3.4
98	3.6	3.5	3.3	3.2
99	3.4	3.3	3.1	3.0
100	3.2	3.1	2.9	2.8
101	3.1	3.0	2.8	2.6
102	3.0	2.8	2.6	2.5
103	2.9	2.7	2.5	2.3
104	2.8	2.6	2.4	2.2
105	2.7	2.6	2.3	2.1
106	2.7	2.5	2.3	2.1
107	2.7	2.5	2.3	2.1
108	2.7	2.5	2.3	2.0
109	2.6	2.5	2.3	2.0
110	2.6	2.5	2.2	2.0
111	2.6	2.4	2.2	2.0
112	2.6	2.4	2.2	2.0
113	2.6	2.4	2.2	1.9
114	2.5	2.4	2.1	1.9
115	2.5	2.3	2.1	1.8
116	2.4	2.2	2.0	1.8
117	2.3	2.1	1.9	1.6
118	2.1	1.9	1.7	1.4
119	1.9	1.7	1.3	1.1
120+	1.6	1.4	1.1	1.0

(e) *Mortality rates.* The following are the mortality rates used to calculate the tables set forth in paragraphs (b), (c) and (d) of this section.

TABLE 4 TO PARAGRAPH (e)

Age	Probability of death
0	0.001765
1	0.000442
2	0.000293
3	0.000232
4	0.000177
5	0.000162
6	0.000153
7	0.000145
8	0.000132
9	0.000127
10	0.000128
11	0.000135
12	0.000146
13	0.000165
14	0.000192
15	0.000224
16	0.000253
17	0.000277
18	0.000293
19	0.000305
20	0.000314
21	0.000344
22	0.000378
23	0.000421
24	0.000467
25	0.000520
26	0.000581
27	0.000630
28	0.000677
29	0.000720
30	0.000762
31	0.000797

TABLE 4 TO PARAGRAPH (e)—Continued

Age	Probability of death
32	0.000822
33	0.000830
34	0.000826
35	0.000818
36	0.000813
37	0.000818
38	0.000830
39	0.000847
40	0.000872
41	0.000902
42	0.000938
43	0.000974
44	0.001012
45	0.001061
46	0.001128
47	0.001223
48	0.001345
49	0.001488
50	0.001661
51	0.001883
52	0.002134
53	0.002413
54	0.002722
55	0.003057
56	0.003418
57	0.003805
58	0.004213
59	0.004646
60	0.005104
61	0.005587
62	0.006102
63	0.006655
64	0.007255
65	0.007913
66	0.008265
67	0.008687

TABLE 4 TO PARAGRAPH (e)—Continued

Age	Probability of death
68	0.009194
69	0.009804
70	0.010535
71	0.011413
72	0.012454
73	0.013684
74	0.015121
75	0.016798
76	0.018740
77	0.020993
78	0.023598
79	0.026624
80	0.030122
81	0.034190
82	0.038892
83	0.044271
84	0.050391
85	0.057285
86	0.064967
87	0.073466
88	0.082774
89	0.092864
90	0.103667
91	0.115152
92	0.127474
93	0.140876
94	0.155859
95	0.173011
96	0.188348
97	0.205840
98	0.224127
99	0.243120
100	0.262731
101	0.282787
102	0.303096
103	0.323605

TABLE 4 TO PARAGRAPH (e)—
Continued

Age	Probability of death
104	0.344149
105	0.362406
106	0.373952
107	0.382053
108	0.384203
109	0.386443
110	0.388694
111	0.390860
112	0.393195
113	0.395445
114	0.397687
115	0.400000
116	0.400000
117	0.400000
118	0.400000
119	0.400000
120	1.000000

(f) *Applicability dates*—(1) *In General.* The life expectancy tables and Uniform Lifetime Table set forth in this section apply for distribution calendar years beginning on or after January 1, 2021. For life expectancy tables and the Uniform Lifetime Table applicable for earlier distribution calendar years, see § 1.401(a)(9)–9, as set forth in 26 CFR part 1 revised April 1, 2019 (formerly applicable § 1.401(a)(9)–9).

(2) *Application to life expectancies that may not be recalculated*—(i) *Applicability of current tables.* If an employee died before January 1, 2021, and, under the rules of § 1.401(a)(9)–5, the distribution period that applies for a calendar year following the calendar year of the employee's death is equal to a single life expectancy calculated as of the calendar year of the employee's death (or, if applicable, the following calendar year), reduced by 1 for each subsequent year, then that life expectancy is reset as provided in paragraph (f)(2)(ii) of this section. Similarly, if an employee's sole beneficiary is the employee's surviving spouse, and the spouse dies before January 1, 2021, then the spouse's life expectancy for the calendar year of the spouse's death (which is used to determine the applicable distribution period for later years) is reset as provided in paragraph (f)(2)(ii) of this section.

(ii) *Determination of applicable distribution period.* With respect to a life expectancy described in paragraph (f)(2)(i) of this section, the distribution period that applies for a distribution calendar year beginning on or after January 1, 2021, is determined by using the Single Life Table in paragraph (b) of this section to determine initial life expectancy for the age of the relevant individual in the relevant calendar year and then reducing the resulting distribution period by 1 for each subsequent year. For example, assume that an employee died at age 80 in 2018 and the employee's designated beneficiary (who was not the employee's spouse) was age 75 in the year of the employee's death. For 2019, the distribution period that would have applied for the beneficiary was 12.7 years (the period applicable for a 76 year old under the Single Life Table in formerly applicable § 1.401(a)(9)–9), and for 2020, it would have been 11.7 years (the original distribution period, reduced by 1 year). For 2021, the applicable distribution period would be 12.0 years (the 14.0 year life expectancy for a 76 year old under the Single Life Table in paragraph (b) of this section, reduced by 2 years).

Sunita Lough,

Deputy Commissioner for Services and Enforcement.

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