

SHOW ALL WORK!

$$R = mS \quad P(E) = \frac{m}{n} \quad E = P_1v_1 + P_2v_2 \quad P = R - B - C \quad A = \frac{p[(1+r)^n - 1]}{r}$$

1. Phoebe is 25 years old and is earning \$30,000 annually. Use the Multiples-of-Salary Chart to find the amount of life insurance she should buy if she would like to replace 60% of her income.



1. _____

2. Rachel Green’s father is 50 years old and is comparing premiums for different types of life insurance.

a) How much would a \$250,000 term insurance policy for cost Mr. Green per year?

a. _____

b) How much would the same amount of whole life insurance cost him?

b. _____

c) In one year, how much would he save by buying term insurance instead of whole life?

c. _____

3. What is the break-even premium for 27-year-old Ross' one-year \$200,000 term insurance policy? Assume the direct and indirect expenses for issuing the policy are \$25.

3. _____

4. What profit does an insurance company expect to make for a one-term insurance policy for 100,000 23-year-olds? The face value of the policy is \$45,000 with an annual premium of \$100. Let the cost of each policy be \$30.

4. _____

5. At 25-years-old, Monica began contributing \$1,300 a year to an annuity paying 9.5% annually. How much will she have in the account when she is 40-years old?

5. _____

6. If Monica began contributing when she was 20 instead of when she was 25, how much more would have been in her account at age 40?

6. _____

F•R•I•E•N•D•S



Chandler is comparing term insurance and whole life insurance. He wants to know if he could be better off financially if he buys terms insurance instead of whole life insurance and investing money in an IRA.

7. How much money would Chandler save each year if when he is 35-years-old he buys a term policy instead of a whole life policy?

7. _____

8. What would the cash value of a \$100,000 whole life insurance policy for a 25-year-old person have after 15 years?

8. _____

| MULTIPLES-OF-SALARY CHART | | | | | | | | |
|---------------------------|-------------|-----|----------|-----|----------|-----|----------|-----|
| Current Gross Earnings | Current Age | | | | | | | |
| | 25 Years | | 35 Years | | 45 Years | | 55 Years | |
| | 75% | 60% | 75% | 60% | 75% | 60% | 75% | 60% |
| \$ 7,500 | 4.0 | 3.0 | 5.5 | 4.0 | 7.5 | 5.5 | 6.5 | 4.5 |
| 9,000 | 4.0 | 3.0 | 5.5 | 4.0 | 7.5 | 5.5 | 6.5 | 4.5 |
| 15,000 | 4.5 | 3.0 | 6.5 | 4.5 | 8.0 | 6.0 | 7.0 | 5.5 |
| 23,500 | 6.5 | 4.5 | 8.0 | 5.5 | 8.5 | 6.5 | 7.5 | 5.5 |
| 30,000 | 7.5 | 5.0 | 8.0 | 6.0 | 8.5 | 6.5 | 7.0 | 5.5 |
| 40,000 | 7.5 | 5.0 | 8.0 | 6.0 | 8.0 | 6.0 | 7.0 | 5.5 |
| 65,000 | 7.5 | 5.5 | 7.5 | 6.0 | 7.5 | 6.0 | 6.5 | 5.0 |

USE THE FOLLOWING TERMS FOR QUESTIONS #9-16

| | |
|--------------------------|--------------------------------|
| A. Term Insurance | F. Whole Life Insurance |
| B. Premiums | G. Annuity |
| C. IRA | H. 401(k) Plan |
| D. Beneficiary | J. Tax Shelter |
| E. Dependent | |

- 9. A person designated to receive the death benefit in a life insurance policy. 9. _____
- 10. An investment that legally reduces the payment of taxes. 10. _____
- 11. Investment plan that provides income upon retirement 11. _____
- 12. An account in which money is invested for retirement and taxes are deferred until retirement. 12. _____
- 13. An amount of money paid on a regular basis for an insurance policy 13. _____
- 14. Life insurance that pays death benefits for a stated number of years; one of 2 major kinds of insurance 14. _____
- 15. Life insurance in which premiums are paid for your entire life 15. _____
- 16. A pension plan approved by the IRS through which an employer can make tax-sheltered contributions 16. _____

BONUS: In what year was the ROTH IRA introduced? BONUS: _____

| COMPARISON TABLE FOR TERM AND WHOLE LIFE PREMIUMS | | | |
|--|---------------------------------|-------------------|------------------------------|
| Policy face value is \$100,000 | | | |
| Age | Five-Year Renewable Term | Whole Life | First-Year Difference |
| 20 | \$205 | \$ 775 | \$ 570 |
| 25 | 207 | 918 | 711 |
| 30 | 218 | 1112 | 894 |
| 35 | 254 | 1374 | 1120 |
| 40 | 363 | 1729 | 1366 |
| 45 | 562 | 2127 | 1565 |
| 50 | 878 | 2689 | 1811 |

**EXPECTED DEATHS
PER 100,000 ALIVE AT SPECIFIED AGE**

| Age | Expected Deaths Within 1 Year | Expected to be Alive in 1 Year |
|-----|-------------------------------|--------------------------------|
| 15 | 63 | 99,937 |
| 16 | 79 | 99,921 |
| 17 | 91 | 99,909 |
| 18 | 99 | 99,901 |
| 19 | 103 | 99,897 |
| 20 | 106 | 99,894 |
| 21 | 110 | 99,890 |
| 22 | 113 | 99,887 |
| 23 | 115 | 99,885 |
| 24 | 117 | 99,883 |
| 25 | 118 | 99,882 |
| 26 | 120 | 99,880 |
| 27 | 123 | 99,877 |
| 28 | 127 | 99,873 |
| 29 | 132 | 99,868 |

**ACCUMULATED CASH VALUE OF \$100,000 WHOLE LIFE POLICY
AGE OF ISSUE: 25**

| Year | Person's Age | Cash Value | Year | Person's Age | Cash Value |
|------|--------------|------------|------|--------------|------------|
| 1 | 25 | \$ 0 | 11 | 35 | \$10,187 |
| 2 | 26 | 700 | 12 | 36 | 11,501 |
| 3 | 27 | 1500 | 13 | 37 | 12,860 |
| 4 | 28 | 2300 | 14 | 38 | 14,246 |
| 5 | 29 | 3100 | 15 | 39 | 15,667 |
| 6 | 30 | 4020 | 16 | 40 | 17,094 |
| 7 | 31 | 5158 | 17 | 41 | 18,555 |
| 8 | 32 | 6349 | 18 | 42 | 20,014 |
| 9 | 33 | 7538 | 19 | 43 | 21,563 |
| 10 | 34 | 8898 | 20 | 44 | 23,197 |