

Life Insurance

People buy life insurance for themselves or for others to provide financial protection against loss of income in the event that the person insured dies.

Here are some key life insurance terms:

Beneficiary: the person who receives the insurance money

Face value: the amount of money received from the policy

There are two main types of life insurance policies:

Term insurance policies provide protection for a limited period of time – usually 5, 10, 15, or 20 years. The policies can then be renewed at higher premiums. Term insurance is the simplest and least expensive form of insurance.

Whole life insurance (sometimes called **universal life insurance**) policies provide permanent lifetime protection for as long as you pay your premiums. Whole life insurance costs more than term insurance. In these policies, the premiums you pay build up like a savings account. You can decide to cash in the policy and receive the money, called the cash value.

Life insurance rates vary depending on several factors:

- the age of the insured person
- the gender of the insured person
- the face value of the policy

As a person gets older, the cost of insurance rises. This is because the person is more likely to die, and the insurance company will have to pay the beneficiary. Insurance rates for females are generally lower than those for males because women tend to live longer.

Some Annual Premiums per \$1,000

Age at Issue		Term Insurance		Whole Life
Male	Female	10-Year	20-Year	
20	23	\$2.86	\$3.90	\$13.67
25	28	\$3.27	\$5.74	\$15.78
30	33	\$3.72	\$7.83	\$18.87
35	38	\$4.42	\$10.22	\$23.37
40	43	\$5.87	\$14.58	\$28.51
45	48	\$7.42	\$18.46	\$32.17

Name _____ Date _____

Example: Ronald is a 25-year-old male who wants to buy \$30,000 of insurance. What would his annual premium be for 10-year term insurance? What would his annual premium be for whole life insurance?

Step 1 Multiply by the number of thousands to find the annual premium for a 10-year term.
 $30 \times \$3.27 = \98.10

Ronald's annual premium would be \$98.10 for 10-year term insurance.

Step 2 Multiply to find the annual premium for whole life.
 $30 \times \$15.78 = \473.40

Ronald's annual premium would be \$473.40 for whole life insurance.

Think About It

1. Why do term insurance rates increase as you get older?

2. Why are the premiums for whole life insurance higher than for term insurance?

Practice

Remember to estimate whenever you use your calculator.

Use the premium table on the previous page to compute the annual premium for each policy.

Type of Policy	Age	Gender	Face Value	Premium
10-year term	25	Male	\$35,000	1. _____
Whole life	28	Female	\$50,000	2. _____
Whole life	20	Male	\$25,000	3. _____
20-year term	23	Female	\$40,000	4. _____
10-year term	30	Male	\$75,000	5. _____
Whole life	40	Male	\$75,000	6. _____
20-year term	38	Female	\$50,000	7. _____
Whole life	48	Female	\$50,000	8. _____

Name _____ Date _____

Use the premium table on page 112 to solve.

9. How much less per year would a 35-year-old male pay for \$25,000 of 20-year term insurance than for whole life? _____
10. Jack purchased a \$150,000 of 20-year term insurance at age 25. What will his total premiums be over the 20 years? _____

Some Annual Premiums per \$1,000

Age at Issue		Term Insurance		Whole Life
Male	Female	10-Year	20-Year	
20	23	\$2.52	\$4.10	\$12.43
25	28	\$3.15	\$5.35	\$13.96
30	33	\$3.49	\$6.90	\$16.80
35	38	\$4.15	\$9.25	\$19.09
40	43	\$5.36	\$13.55	\$26.26
45	48	\$6.87	\$19.25	\$34.35

Remember to estimate whenever you use your calculator.

Use the premium table above to complete the annual premium for each policy.

Type of Policy	Age	Gender	Face Value	Premium
10-year term	33	Female	\$60,000	11. _____
Whole life	25	Male	\$25,000	12. _____
20-year term	35	Male	\$75,000	13. _____
10-year term	28	Female	\$65,000	14. _____
Whole life	33	Female	\$75,000	15. _____
Whole life	23	Female	\$50,000	16. _____

Solve.

17. How much less per year would a 43-year-old female pay for \$45,000 of 10-year term insurance than for 20-year term insurance? _____
18. Jack purchased \$90,000 of 10-year term insurance at age 35. What will his total premiums be over the 10 years of his policy? _____

Extension **Decreasing Term Insurance**

As people get older, their need for financial protection often decreases. For this reason, decreasing term insurance is also available for less cost than level term insurance. As each year passes, the amount of insurance coverage decreases. However, the premiums usually stay the same during the entire time of the insurance contract.

Coverage per \$1,000 Initial Value of 10-Year Decreasing Term Insurance			
Year	Coverage	Year	Coverage
1	\$1,000	6	\$555
2	\$940	7	\$460
3	\$860	8	\$340
4	\$730	9	\$250
5	\$660	10	\$140

Example: Helen bought \$100,000 of 10-year decreasing term life insurance. How much insurance coverage will she have in the second year of her policy?

Step 1 Find the amount of coverage in the second year.
 Coverage is \$940 for each \$1,000 of the initial value.

Step 2 Multiply to find the coverage.
 $\$940 \times 100 = \$94,000$

In the second year of the policy, Helen's insurance coverage is \$94,000.

Use the coverage table to solve.

- Sam bought \$40,000 of 10-year decreasing term insurance. How much insurance coverage will he have in the 4th year of the policy? _____
- Rachel bought \$60,000 of 10-year decreasing term insurance. How much insurance coverage will she have in the 7th year of the policy? _____

Practice

- | | |
|-------------|----------------|
| 1. \$133.75 | 2. \$162.50 |
| 3. \$655.20 | 4. \$33.10 |
| 5. \$90.77 | 6. \$80.29 |
| 7. \$756.77 | 8. \$63.14 |
| 9. \$425.50 | 10. \$1,480.96 |
| 11. \$474 | 12. \$1,548.25 |
| 13. \$450 | 14. \$2,121.88 |
| 15. \$8,400 | 16. \$707.85 |

Extension

- | | |
|------------|----------|
| 1. \$400 | 2. \$500 |
| 3. \$4,250 | 4. \$510 |
| 5. \$1,410 | |

Pages 101-103**Practice**

- | | |
|--------------|---------------|
| 1. \$2,400 | 2. \$4,400 |
| 3. \$7,040 | 4. \$4,740 |
| 5. \$7,600 | 6. \$8,137.50 |
| 7. 3% | 8. 4% |
| 9. 3.5% | 10. 4.5% |
| 11. 4.5% | 12. 1.5% |
| 13. \$2,800 | 14. \$7,125 |
| 15. \$6,340 | 16. \$4,425 |
| 17. \$5,370 | 18. \$3,960 |
| 19. 3% | 20. 2% |
| 21. 4% | 22. 2.5% |
| 23. 4.5% | 24. 2% |
| 25. \$760 | 26. \$32,500 |
| 27. 2.5% | 28. \$62,500 |
| 29. 4.5% | 30. \$14,760 |
| 31. \$93,750 | 32. \$5,010 |

Pages 105-107**Think About It**

1. Federal withholding tax deductions are prepayments on your annual federal income tax. This money helps fund the activities of the federal government. Social Security taxes are worker contributions to the Social Security fund.

This fund pays benefits to retired or disabled workers.

Practice

- | | |
|----------------|--------------|
| 1. \$378 | 2. \$314.60 |
| 3. \$314 | 4. \$233.21 |
| 5. \$332.50 | 6. \$240.79 |
| 7. \$280.68 | 8. \$234.09 |
| 9. \$114.50 | 10. \$103.74 |
| 11. \$402.38 | 12. \$402.38 |
| 13. \$45.50 | 14. \$40.78 |
| 15. \$15.30 | 16. \$8.50 |
| 17. \$292.30 | 18. \$2,366 |
| 19. \$2,120.56 | 20. \$795.60 |
| 21. 73% | 22. \$103.20 |
| 23. 76% | 24. \$372.03 |
| 25. 80% | 26. \$492.50 |
| 27. \$243.95 | 28. \$76.05 |
| 29. City tax | 30. \$30.13 |

Pages 109-111**Think About It**

1. There are many routine and relatively inexpensive medical expenses. Having a deductible allows these expenses to be paid by you and leaves the insurance for greater expenses that you might not be able to afford. A deductible means that you will always be responsible for some of the cost of health care. As a result, you may not rush to the doctor for unnecessary treatments since you must pay for some of this yourself.
2. When insurance companies set the price of the policies for large groups, they can use probabilities and previous experience to predict the kinds of medical expenses

they will have to pay. With a large group, the risks are spread out over many people, and the risks can be more evenly shared.

Practice

- | | |
|----------------------------|----------------|
| 1. \$248 | 2. \$227 |
| 3. \$0 | 4. \$88 |
| 5. \$84 | 6. \$161 |
| 7. \$2,079 | 8. \$406 |
| 9. \$322.40 | 10. \$423.60 |
| 11. \$119.35 | 12. \$1,432.20 |
| 13. \$29.20 | 14. \$350.40 |
| 15. \$82.13 | |
| 16. \$985.50 (or \$985.56) | |
| 17. \$27.28 | 18. \$327.36 |
| 19. \$924 | 20. \$496 |
| 21. \$0 | 22. \$362 |
| 23. \$2,546.25 | |
| 24. \$1,098.75 | |
| 25. \$29.45 | 26. \$372.86 |
| 27. \$3,510 | 28. \$598.50 |
| 29. \$551.98 | 30. \$3,072 |

Pages 113-115**Think About It**

Life Insurance

1. As you get older, the probability that you will die increases each year, so the likelihood that the insurance company will have to pay death benefits also increases. This is why rates and annual premiums increase with age.
2. Whole life premiums cover more than just death benefits. The premiums build up like a savings account. Eventually you can decide to cash in the policy and receive this money. This savings feature adds to the cost of the policy.

Practice

1. \$114.45 2. \$789
3. \$341.75 4. \$156
5. \$279 6. \$2,138.25
7. \$511 8. \$1,608.50
9. \$328.75 10. \$17,220
11. \$209.40 12. \$349
13. \$693.75 14. \$204.75
15. \$1,260 16. \$621.50
17. \$368.55 18. \$3,735

Extension

1. \$29,200 2. \$27,600

Page 117**Practice**

1. 63.7 2. 54.1
3. 39.9 4. 26.7
5. 79.1 6. 80.4
7. 82.5 8. 88.8
9. 35
10. a. 68.6 b. 44.6 c. 15.0
11. Possible answers include advances in medical treatments for diseases such as cancer and heart disease; childhood vaccinations and immunizations; the discovery of new drugs.

Pages 119-121**Decision Making**

1. term 2. whole life
3. \$3.40 4. \$9.50
5. 5 years 6. life
7. no 8. no
9. yes
10. not applicable
11. \$130; \$170; \$475
12. SBLI 13. \$4,500
14. \$250
15. less expensive
16. Jefferson policy
17. term 18. term
19. whole life 20. \$5.98

21. \$3.40 22. \$13.20
23. 20 years 24. 10 years
25. life 26. no
27. no 28. yes
29. no 30. yes
31. not applicable
32. a. \$299 b. \$170 c. \$660
33. Ansonia 34. \$13,875
35. \$975
36. less expensive

Pages 122-123**Money Tips**

1. \$1,912.50
2. a. \$36,940 b. \$32,280
3. Self-employed people pay other expenses that company employees do not. Besides benefits like health insurance, self-employed people must pay for their own offices, supplies, equipment, computer, Internet service, telephone, etc. However, self-employed people are able to deduct many of these expenses from their income taxes.
4. increased
5. It has increased by \$1,468.80. If she had worked at the agency all year, she would have paid \$2,937.60 (7.65% of \$38,400). Instead Maya paid \$1,468.80 as an employee and \$2,937.60 as a self-employed person (15.3% of \$19,200).
6. Company employees are paid for a full day, even though they do not work every minute of the day. They are also paid for sick days and vacations. Many receive disability payments if they

are unable to work and pension or retirement plans. Self-employed people are paid only for actual working time and must plan for their own retirement.

Page 125**Estimation Skill**

1. 700 2. 11,000
3. 70,000 4. 30,000
5. 90,000 6. \$7.00
7. \$18.00 8. \$11.00
9. \$0.80 10. \$1.30
11. 0.9 12. 1.0
13. 0.9 14. 0.06
15. 0.08 16. 1,000
17. 90,000 18. \$17.00

Pages 126-127**Part III Review**

1. a 2. b
3. c 4. \$432
5. \$281.25 6. \$579.70
7. \$557.69 8. \$903.8
9. \$20,020 10. \$87.50
11. \$552.00 12. \$10,335
13. \$90.21 14. \$4,643.60
15. \$258.10 16. \$92.00
17. \$230.25 18. \$1,673
19. \$421.60 20. \$803.40

Pages 128-129**Part III Test**

1. \$406.60 2. \$640.70
3. \$676.50 4. \$342.19
5. \$440.63 6. \$75.57
7. \$68.88 8. \$547.50
9. \$255 10. \$194.63
11. \$378 12. \$2.19
13. \$731.54 14. \$20,635.68
15. \$334.26 16. \$107.07
17. \$674 18. \$464.10
19. \$309.60 20. \$2,660