

11-1

Computing Health Insurance Premiums

Health insurance protects you against the cost of medical expenses. Two types of group insurance plans are a **preferred provider organization (PPO)** and a **health maintenance organization (HMO)**. For both plans you agree to see doctors from the plan’s network and might pay an additional fee for out-of-network costs.

Example

Find the annual contribution and the monthly cost for insurance.

Concetta Andriola has an individual membership in her company’s group health insurance program. The annual premium is \$2,500, of which her employer pays 75 percent.

1. Find the employee’s percent.
Employee’s Percent = 100% – Employer’s Percent
 $100\% - 75\% = 25\%$
2. Find the annual contribution.
Employee’s Contribution = Total Premium × Employee’s Percent
 $\$2,500 \times 25\% = \625 **annual contribution**
3. Find the monthly cost.
 $\$625 \div 12 = \52.08 **monthly cost**

Practice

Find the annual contribution and the monthly cost.

	Employee	Annual Premium	Portion Paid by Employer	Employee’s Annual Contribution	Employee’s Monthly Cost
1.	Lila Matthews	\$2,400	80%	a.	b.
2.	David Pierce	4,200	85%	a.	b.
3.	Jared Booths	4,475	75%	a.	b.
4.	Emily Lance	2,725	$\frac{2}{3}$	a.	b.

5. Sal Huerrero must pay 100 percent of his PPO health insurance plan, which has an annual premium of \$3,000. He also opts for dental coverage at an additional annual cost of \$750. If his premiums are paid quarterly, how much does he pay each quarter?
6. **Standardized Test Practice** Patty Lubbock has a family membership in her company’s PPO health insurance plan. The annual premium is \$4,950, of which her employer pays 75 percent. She also opts for dental and vision coverage, for which she pays the total annual costs of \$324 and \$192 respectively. How much is deducted from Lubbock’s weekly paycheck to cover the cost of insurance?
A. \$1,237.50 B. \$1,753.50 C. \$146.13 D. \$33.72

11-2

Calculating Health Insurance Benefits

Your health insurance plan may not pay for all procedures. You might have an annual **deductible**, an amount you must pay before your insurance company starts paying. Sometimes you have to make a **co-payment**, which is your portion of the cost, such as \$10 for each office visit. You might also have to pay **co-insurance**, which is a percentage of medical expenses you have to pay beyond your deductible.

Example

Calculate the cost of services.

Concetta Andriola has the health care plan outlined in the Health Care Benefits Schedule on page 179. She is single and had the following network health care costs during the year: 5 physician visits, 2 specialist visits, 1 emergency room visit, and a hospital charge of \$4,287.

1. Find her deductible. It is \$300.
2. Find her co-payments (physician, specialist and emergency room).
 $(\$10 \times 5) + (\$20 \times 2) + (\$50 \times 1) = \140
3. Find her co-payment for hospital charges.
 $\$4,287 \times (100\% - 90\%) = \428.70
4. Find the cost to patient.

$$\begin{matrix} \text{Amount Paid} \\ \text{by Patient} \end{matrix} = \text{Deductible} + \text{Co-payments} + \begin{matrix} \text{Co-insurance} \\ \text{Amount} \end{matrix} + \begin{matrix} \text{Other} \\ \text{Charges} \end{matrix}$$

$$\$300 + \$140 + \$428.70 = \$868.70 \text{ paid by patient}$$

Practice

Find the amounts.

	Deductible Amount	Number of Co-payments at \$10.00 Each	Amount of the Co-payments	Amount Subject to Co-insurance	Insured Co-insurance Rate	Amount Paid by Insured	
						Co-insurance	Total
1.	\$ 250	5	a.	\$ 5,000	10%	b.	c.
2.	500	8	a.	7,500	15%	b.	c.
3.	750	10	a.	8,250	20%	b.	c.
4.	1,000	12	a.	10,975	25%	b.	c.

5. **Standardized Test Practice** Patty Lubbock has a family membership in her company's PPO plan outlined in the Health Care Benefits Schedule on page 179. Throughout the year her family incurred *network* costs of 6 physician visits, 10 specialist visits, an emergency room visit costing \$1,226, and 52 home health care visits at \$50 apiece. Her family also had network hospital charges totaling \$3,582. What is the total amount Lubbock must pay before the out-of-pocket maximum?
A. \$1,200.00 **B.** \$900.00 **C.** \$1,588.20 **D.** \$1,568.20



11-3

Computing Annual Premiums for Term Life Insurance

Life insurance protects a family financially if the breadwinner dies. **Term life insurance** can be bought for a specified period of time or up to a specified age. You must renew this type of insurance at the end of each term or it expires. The person you name to receive the insurance money is the **beneficiary**. The beneficiary receives the *face value* of the policy, which is the amount of coverage that you buy.

Example

Find the annual premium.

Concetta Andriola is 45 years old. She wants to purchase a \$100,000, 5-year term life insurance policy.

1. Find the number of units purchased.
 $\$100,000 \div \$1,000 = 100$
2. Find the premium per \$1,000, using the Term Life Insurance table on page 179.
 $\text{Premium per } \$1,000 = \3.54
3. Find the annual premium.
Annual Premium = Number of Units Purchased \times Premium per \$1,000
 $100 \times \$3.54 = \$354 \text{ annual premium}$

Practice

Use the Term Life Insurance table on page 179 to solve the problems below.

	Insured	Age	Coverage	Number of Units	Annual Premium per \$1,000	Annual Premium
1.	Lila Matthews	28	\$ 55,000	a.	b.	c.
2.	David Pierce	35	75,000	a.	b.	c.
3.	Jared Booths	55	100,000	a.	b.	c.
4.	Emily Lance	60	150,000	a.	b.	c.

5. Sal Huerrero has a 5-year term life insurance policy with \$100,000 coverage. He was 30 when he purchased it and is now 35. What is the percent increase in his policy?
6. Mabel Richardson has a 5-year term life insurance policy with \$150,000 coverage. She was 45 when she purchased it and is now 50. What is the percent increase in her policy?
7. Cecil and Miriam Miller both purchase a \$75,000, 5-year term life insurance policy. She is 35, and he is 40. How much more does Cecil's insurance cost per year?
8. **Standardized Test Practice** Patty Lubbock took out a \$125,000, 5-year term life insurance policy at the age of 40. She is now 45 and has renewed the policy. How much more does she pay per year for the policy now than she did when she was 40?
A. \$333.75 B. \$442.50 C. \$108.75 D. \$0.87



Computing Annual Premiums for Other Types of Life Insurance

Whole life insurance, or permanent insurance, offers financial protection throughout your entire life. You pay a set premium during the entire life of the policy. Beside the face value, whole life insurance has a **cash value**, which is an amount of money you receive if you cancel the policy. With a **limited payment policy**, you pay premiums only for a specified number of years or until you reach a certain age. With **universal life insurance**, you pay a minimum premium, and anything over that minimum goes into an account that earns interest.

Example

Compute the annual premium.

Concetta Andriola is 45 years old. She wants to purchase a \$100,000 whole life insurance policy.

- Find the number of units purchased.
 $\$100,000 \div \$1,000 = 100$
- Find the premium per \$1,000, using the Whole Life Insurance table on page 179.
 Premium per \$1,000 = \$18.75
- Find the annual premium.
Annual Premium = Number of Units Purchased × Premium per \$1,000
 $100 \times \$18.75 = \$1,875$ annual premium

Practice

Use the Whole Life Insurance table on page 179 to solve the problems below.

	Type	Gender	Age	Face Value	Number of Units	Cost per \$1,000	Annual Premium	Monthly Premium
1.	Whole Life	Female	30	\$ 75,000	a.	b.	c.	d.
2.	Paid at 65	Male	35	150,000	a.	b.	c.	d.
3.	Paid at 65	Female	50	225,000	a.	b.	c.	d.
4.	Whole Life	Male	55	275,000	a.	b.	c.	d.

- Sal Huerrero, 35 years old, wants to purchase a \$50,000 universal life insurance policy. What is his monthly premium? What is his annual premium?
- Cecil and Miriam Miller both purchase a \$75,000 whole life insurance policy. She is 35; he is 40. How much more does Cecil's insurance cost per year?
- Standardized Test Practice** Patty Lubbock wanted to take out a \$150,000 whole life insurance policy at the age of 40, but she waited and is now 45. How much more per year does she pay now than if she had bought the policy at age 40?
 A. \$2,175.00 B. \$2,812.50 C. \$4.25 D. \$637.50

11 Chapter Review

Insurance—Either/Or

Insurance can be expensive, but doing without it can be a lot more expensive. It's luck (staying healthy), timing (your age), and natural selection (your gender) that determines what kind of insurance and how much of it is right for you.

Health Insurance—Yes or No?

You're young, single, and healthy. You're also starting your first job, which doesn't pay much. Your company allows you to participate in its PPO group health insurance plan. The cost of a single policy is \$2,450 per year.

1. Since you're a new employee, you have to pay 100 percent of the cost of your policy. How much is deducted from your weekly paycheck to cover health insurance?
2. You've been with the company for a year now and have earned some benefits. Your employer now pays 80 percent of your health insurance premium. How much is deducted from your weekly paycheck to cover health insurance?

Now suppose you smashed your knee in a weekend soccer match. As a result of your injury, you incurred the following *network* medical expenses last year: 3 physician visits costing \$50 each; 2 specialist visits costing \$90 each; 20 physical therapy sessions at a cost of \$60 each; and a hospital charge for surgery of \$4,298.

3. Using the benefits outlined in the Health Care Benefits Schedule on page 179, what would your total medical expense be with insurance before the out-of-pocket maximum?
4. What would your total medical expense be without insurance?

Life Insurance—Now or Later?

You're 25 years old and you're considering buying life insurance. Suppose you're female and you want to purchase a \$100,000, 5-year term life insurance policy.

5. What is your annual premium?
6. What would your annual premium be if you waited until you were 45 to take out that same policy?

Suppose you're a 25-year-old male and you're considering taking out a \$100,000 whole life insurance policy.

7. What is your annual premium?
8. What would your annual premium be if you waited until you were 45?