



Objective: REVIEW

Day 2

III. Solving Proportions Using Equivalent Ratios

A. Solve each problem by setting up and solving a proportion. Use equivalent ratios to solve the proportion.

3. The average person breathes 35 pounds of air per day. At this rate, how many pounds of air will the average person breathe in seven days?
4. You are on a hockey team. Your time on the ice is 12 minutes per game. A season is twenty games. How many minutes do you play during the season?
5. In an hour, a jogger burns about 4 calories per pound of body weight. How many calories will a jogger who weighs 151 pounds burn in an hour?
6. In the old British money system, 5 shillings was equal in value to 1 crown. Emily had 45 shillings. What was the value in crowns?
7. A movie package can be added to a customer's cable TV service for a cost of \$8 per month. How much will the additional movie package cost for thirteen months?
8. Seventeen trees are saved for each ton of paper recycled. How many tons of paper will need to be recycled to save 51 trees?
9. There are 54 girls in a bowling league. There are two girls for every boy in the league. How many boys are in the league?
10. A typical home uses a total of seven kilowatts of electricity for each kilowatt of electricity used by the refrigerator. How much of a \$70 electric bill is due to using the refrigerator, assuming that every kilowatt costs the same amount?
11. A jewelry store makes \$5 profit for each \$1 they spend on jewelry. A jewelry store owner made a profit of \$95 on a necklace. What was the original cost of the necklace?
12. During long-distance races, a typical sled dog will run at a rate of approximately nine miles per hour. If a sled dog runs at this rate for 5 hours, how many miles could it run?

VI. Solving Proportions Using Means and Extremes

A. Solve each problem by setting up and solving a proportion. Set the product of the means and extremes equal to each other to solve the proportion.

1. The Arizona Cardinals won ten games out of sixteen of their games during the 2009 regular season. At this rate, how many games do they need to play to win 50 games?
2. The 18 wind turbines on Windy Hill are enough to meet the electrical needs of all 6 houses on Breezy Lane. How many wind turbines are needed to meet the electrical needs of 26 houses?
3. Between 1990 and 2000, the population of New York City increased at a rate of 32 people every four hours. By how many people would the population have increased in 63 hours?
4. A local survey determined that 4 out of every 10 Internet users have downloaded music at some point. At this rate, out of 60 Internet users, how many have downloaded music?
5. The string that produces the lowest tone on a piano vibrates 87 times in 3 seconds. How many times would this string vibrate in 12 seconds?
6. A 10-ounce package of animal cookies costs \$2. What should a 35-ounce package cost, assuming the same cost per ounce?
7. On Mercury, you weigh 2 pounds for each 5 pounds you weigh on Earth. You weigh 135 pounds on Earth. How much do you weigh on Mercury?
8. After walking for 15 minutes, Zachary's treadmill displayed "120 calories burned". At this rate, how many calories will Zachary burn in 65 minutes?

- 9.** A hybrid car uses 1 gallon of gasoline to drive 54 miles. How many gallons of gasoline would be used to travel 162 miles?
- 10.** Nicholas owns a pet bearded dragon named Oscar, which is a type of lizard. It typically eats 51 crickets in 2 days. How many days has Nicholas fed Oscar if he has eaten 102 crickets?
- 11.** In an hour, a downhill skier burns about 5 calories for each two pounds of body weight. How many calories does a 160-pound downhill skier burn in an hour?
- 12.** You have started your own online business selling DVDs. You sell twenty-four DVDs per week online. How many DVDs do you sell in six weeks?