

**Lesson 4.3**

**Extra Practice**

Find the unit rate.

Divide

To find unit rate  $y \div x$

1. 360 miles in 6 hours  $60 \text{ mi} : 1 \text{ hr}$
2. 18 bowlers on 6 lanes  $3 : 1$
3. \$28 for 7 people  $4 : 1 \text{ person}$
4. 100 books in 5 boxes  $20 : 1 \text{ box}$   
books
5. 24 cups for 4 people  $6 \text{ cups} : 1 \text{ person}$
6. 320 liters in 5 bottles  $64 \text{ L} : 1 \text{ bottle}$
7. 96 feet in 12 seconds  $8 \text{ ft} : 1 \text{ sec}$
8. 234 miles on 9 gallons  $26 \text{ mi} : 1 \text{ gal}$
9.  $\frac{3}{4}$  quart per  $\frac{1}{2}$  ounce  $1\frac{1}{2} \text{ qt} : 1 \text{ oz}$
10. 12 pounds for every 10 servings  $1.2 \text{ lb} : 1 \text{ serv}$

Find the missing values in the ratio table. Then write the equivalent ratios.

Going from y to x  $\div$  unit rate

11.  $y \div x$

Minutes	2	4	10	16
Laps	1	2	5	8

$4 \div 8 = 0.5$   
 $4 \cdot 0.5 = 2$   
 $5 \div 0.5 = 10$   
 $8 \div 0.5 = 16$

12.  $y$

Servings	2	3	4	5
Protein (grams)	30	45	60	75

$15$   
 $3 \cdot 15 = 45$   
 $60 \div 15 = 4$   
 $75 \div 15 = 5$

Going from x to y  $\cdot$  unit rate

Tell whether the rates are equivalent. Justify your answer.

13. 9 miles for every  $\frac{1}{2}$  hour  $9 \div \frac{1}{2} = 18$
14.  $\frac{2}{5}$  gram for every  $\frac{3}{10}$  serving  $\frac{2}{5} \div \frac{3}{10} = 1\frac{1}{3}$
- 6 miles for every 20 minutes  $6 \div 20 = 0.3$   $\frac{5}{2}$  grams for every  $\frac{1}{5}$  serving  $\frac{5}{2} \div \frac{1}{5} = 12\frac{1}{2}$

15. You run 3 miles in 24 minutes. What is your average rate of speed in miles per minute?  
 $3 \div 24 = 0.125 \text{ mi} : 1 \text{ min}$

16. Dishwasher detergent is sold in individual packets. You can buy a box of 20, 60, or 90 packets.
  - a. The 20-packet box sells for \$5.49. What is the unit rate?  $\$0.27$  per packet
  - b. The 60-packet box sells for \$10.97. What is the unit rate?  $\$0.18$  per packet
  - c. The 90-packet box sells for \$18.95. What is the unit rate?  $\$0.21$  per packet
  - d. Which box is the best value? Explain your answer.

60 packet box  
 The individual packet costs less than the others.