Name _____ Class _____ Date _____

2-6 Practice

Form G

Ratios, Rates, and Conversions

Convert the given amount to the given unit.

1. 15 days; hours

2. 5 hr; min

3. 5 liters; qt

4. 25 km; cm

Example

1) 15 days; hours

15 days . $\frac{24 \text{ hours}}{1 \text{ day}}$ = 360 hrs

5. The builder measures the perimeter of the foundation to be 425 ft. He must order steel beams to install around the perimeter of the foundation. Steel must be ordered in meters. How many meters of steel should the builder order? 1m ≈ 3.28ft

5) 425ft . $\frac{1 \text{ m}}{3.28 \text{ ft}}$

= $\frac{425}{3.28}$ = 129.6m

6. Mrs. Jacobsen purchased a 5-pound package of ground beef for $12.40. She decided to use 8 ounces each day for dinner recipes. What was the cost of ground beef per meal?

7. Car 1 drove 408 miles in 6 hours and Car 2 drove 365 miles in 5 hours during the cross-country road race. Who had the fastest average speed?

Omit 8-14

Determine if each rate is a unit rate. Explain.

15. 100 feet per 2 seconds

16. 22 miles per gallon

Find each unit rate.

17. 4 pounds of green peppers cost $7.56.

18. Rahul travelled 348 miles in 6 hours.

19. Cheryl assembled 128 chairs in 16 hours.

2) 5hr; min

$$5\text{hr} \cdot \frac{60\text{m}}{1\text{hr}} = 300\text{min}$$

3) 5liters; qt

$$5\text{liters} \cdot \frac{1\text{qt}}{.95\text{liters}} = \boxed{5.3\text{qt}}$$

4) 25km; cm

$$25\text{km} \cdot \frac{100{,}000\text{cm}}{1\text{km}} = \boxed{2{,}500{,}000\text{cm}}$$

6) $\frac{\$12.40 \div 5}{5\text{lb} \div 5} = \frac{\$2.48}{1\text{lb}}$ 1lb = 16oz, so 8oz = ½ lb.
$\$2.48 \div 2 = \boxed{\$1.24 \text{ for } 8\text{oz}}$

7)

Car 1	Car 2
$\frac{408\text{mi} \div 6}{6\text{hr} \div 6}$	$\frac{365\text{mi} \div 5}{5\text{hr} \div 5}$
= 68 mi per hour	= 73 mi per hour

Car 2 fastest average speed

15) $\frac{100\text{ft}}{2\text{sec}}$ ← Denominator not 1, so not a unit rate.

16) 22 miles per gallon

$\frac{22\text{mi}}{1\text{gal}}$ ← Unit rate because denominator is 1.

17) $\frac{\$7.56 \div 4}{4\text{lb} \div 4} = \boxed{\frac{\$1.89}{1\text{lb}}}$

18) $\frac{348\text{mi} \div 6}{6\text{hr} \div 6} = \boxed{\frac{58\text{mi}}{1\text{hr}}}$

m) $\frac{128\text{chairs} \div 16}{16\text{ hrs} \div 16} = \boxed{\frac{8\text{chairs}}{1\text{hr.}}}$