

**Unit 7.5 Ratios, Rates and Conversions**

Use these conversions to complete the worksheet.

1 m = 3.28 ft

1 in = 2.54 cm

1 liter = 1.06 qt

1 yd = 91.44 cm

1 pound = 453.6 grams

1 m = 100 cm

1 km = 100,000 cm

1 mi = 5,280 ft

1 gal = 4 qt

1 day = 24 hrs

1 hr = 60 min

1 min = 60 sec

1 pound = 16 ounces

1 yard = 3 feet

1 kl = 1,000 L

1 km = 1,000 m

Convert the given amount to the given unit.

1) 13 days; hours **312 Hours**

2) 70 ft; yd  **$23\frac{1}{3}$  yd**

3) 200 meters; cm **20,000 cm**

4) 6 hr; min **360 min**

5) 14 meters; ft **45.92 ft**

6) 12 in.; cm **30.48 cm**

7) 7 liters; qt **7.42 qt**

8) 2000 cm; yd **21.87 yd**

9) 17 pounds; grams **7711.2 grams**

10) 29 km; cm **2,900,000 cm**

11) 7 mi; ft **36,960 ft**

12. 120 min; s **7,200 s**

13. A builder measures the perimeter of a building to be 530 ft. He must order wood beams to install around the perimeter of the building. Wood must be ordered in meters. How many meters of wood should the builder order?

**161.6 m or 162 m of wood**

14. 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?

**\$1.24 per meal**

15. 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?

**Car 1 = 68 mph      Car 2 = 73 mph, so Car 2 fastest average speed**

**Complete each statement.**

**16.**  $25 \text{ mi/hr} = 670.7 \text{ m/min}$

**17.**  $32 \text{ mi/gal} = 13.65 \text{ km/L}$

**18.**  $10 \text{ m/s} = 32.8 \text{ ft/s}$

**19.**  $14 \text{ gal/s} = 3,360 \text{ qt/min}$

**20.**  $3.5 \text{ days} = 5,040 \text{ min}$

**21.**  $100 \text{ yd} = 91.4 \text{ m}$

**22.**  $15 \text{ dollars/hr} = 25 \text{ cents/min}$

**23.**  $5 \text{ L/s} = 0.3 \text{ kL/min}$

**24.**  $62 \text{ in.} = 1.5748 \text{ m}$

**25.**  $7 \text{ days} = 604,800 \text{ s}$