

Lesson 4 Homework Practice

Converting Rates

Convert each rate using dimensional analysis. Round to the nearest hundredth.

- $18 \text{ m/min} = \blacksquare \text{ cm/s}$
- $5.7 \text{ gal/h} = \blacksquare \text{ c/min}$
- $264 \text{ yd/s} = \blacksquare \text{ mi/h}$
- $2 \text{ qt/min} = \blacksquare \text{ gal/h}$
- $99 \text{ in./s} = \blacksquare \text{ mi/day}$
- $154 \text{ mi/h} = \blacksquare \text{ in./s}$
- $44 \text{ mi/min} = \blacksquare \text{ ft/s}$
- $15 \text{ oz/min} = \blacksquare \text{ gal/h}$
- $88 \text{ mi/h} \approx \blacksquare \text{ km/min}$
- $10 \text{ ft/min} \approx \blacksquare \text{ m/h}$
- $165 \text{ L/h} \approx \blacksquare \text{ qt/min}$
- $26 \text{ yd/s} \approx \blacksquare \text{ km/h}$
- $474 \text{ gal/day} \approx \blacksquare \text{ L/week}$
- $33.6 \text{ m/s} \approx \blacksquare \text{ ft/min}$
- $22 \text{ fl oz/min} \approx \blacksquare \text{ mL/s}$
- $299 \text{ km/h} \approx \blacksquare \text{ mi/min}$

Complete each conversion. Round to the nearest hundredth.

- $10 \text{ cm} \approx \blacksquare \text{ in.}$
- $300 \text{ gal} \approx \blacksquare \text{ L}$
- $250 \text{ g} \approx \blacksquare \text{ oz}$
- $5.5 \text{ kg} \approx \blacksquare \text{ lb}$
- $145 \text{ m} \approx \blacksquare \text{ mi}$
- $9.5 \text{ L} \approx \blacksquare \text{ pt}$
- $13 \text{ yd} \approx \blacksquare \text{ m}$
- $1095 \text{ mi} \approx \blacksquare \text{ km}$
- Rita sprinted 77 feet in 10 seconds. How many miles per hour is this?
- Lisa is traveling to Europe. The information from the airlines said that she is only allowed to check 25 kilograms worth of baggage. To the nearest pound, how many pounds is this?
- The space shuttle travels at an orbital speed of about 17,240 miles per hour. How many meters per minute is this? Round to the nearest whole number.