

Grade 6 · Converting Measurement Units · Quiz

Common Core 6.RP.A.3d · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

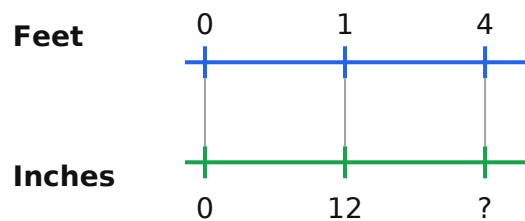
This quiz has 10 multiple-choice questions on converting length, weight, capacity, and metric units. Choose one answer for each question, then read the explanation to see the correct conversion and the common mistake behind each wrong choice.

Grade 6 Common Core: 6.RP.A.3d

Questions

Question 1

How many inches are in 4 feet?



1 foot matches 12 inches.

- A. 48 in
- B. 16 in
- C. 40 in
- D. 36 in

Question 2

Convert 36 inches to feet.

- A. 432 ft
- B. 24 ft
- C. 12 ft
- D. 3 ft

Question 3

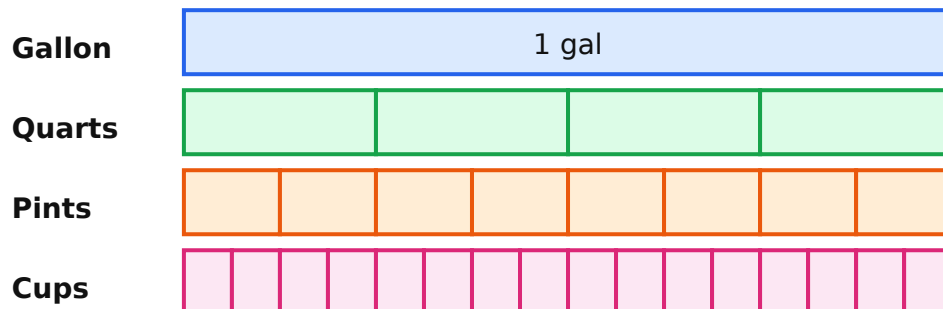
How many ounces are in 3 pounds?

- A. 19 oz

- B. 36 oz
- C. 48 oz
- D. 0.19 oz

Question 4

How many gallons are in 20 quarts?



Gallons, quarts, pints, and cups.

- A. 5 gal
- B. 80 gal
- C. 10 gal
- D. 16 gal

Question 5

How many feet are in 2.5 miles?

- A. 5,282.5 ft
- B. 2,112 ft
- C. 10,560 ft
- D. 13,200 ft

Question 6

Convert 450 centimeters to meters.

- A. 45 m
- B. 0.45 m
- C. 4.5 m
- D. 45,000 m

Question 7

How many cups are in 6 pints?

- A. 3 cups
- B. 24 cups
- C. 12 cups

D. 6 cups

Question 8

Which length is equal to 2 yards?

- A. 24 in
- B. 6 ft
- C. 72 ft
- D. 2 ft

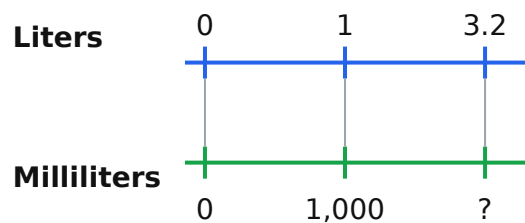
Question 9

Which conversion factor changes gallons to quarts?

- A. $\frac{1 \text{ qt}}{4 \text{ gal}}$
- B. $\frac{4 \text{ qt}}{1 \text{ gal}}$
- C. $\frac{2 \text{ qt}}{1 \text{ gal}}$
- D. $\frac{16 \text{ qt}}{1 \text{ gal}}$

Question 10

Convert 3.2 liters to milliliters.



1 liter matches 1,000 milliliters.

- A. 3,200 mL
- B. 32 mL
- C. 320 mL
- D. 0.0032 mL

Answer key

1. **A** - Multiply by 12 because each foot has 12 inches: $4 \times 12 = 48$. Adding 12 to 4 gives 16, which is not a conversion.
2. **D** - Divide by 12 to go from inches to feet: $36 \div 12 = 3$. Multiplying (432) gives the wrong direction.
3. **C** - Each pound is 16 ounces, so $3 \times 16 = 48$. The choice 36 uses 12 instead of 16.
4. **A** - A gallon has 4 quarts, so divide: $20 \div 4 = 5$. Multiplying gives 80, the wrong direction.
5. **D** - Multiply 2.5 by 5,280 to get 13,200. The value 10,560 is only 2 miles.
6. **C** - There are 100 cm in 1 m, so $450 \div 100 = 4.5$. Dividing by 10 gives 45, which is a common slip.
7. **C** - Each pint has 2 cups, so $6 \times 2 = 12$. Dividing (3) goes the wrong way because cups are smaller than pints.
8. **B** - One yard is 3 feet, so 2 yards are 6 feet. The choice 24 inches equals 2 feet, not 2 yards.
9. **B** - One gallon equals 4 quarts, with gallons on the bottom so they cancel. The value 16 is the number of cups in a gallon.
10. **A** - There are 1,000 mL in 1 L, so $3.2 \times 1,000 = 3,200$. Moving the decimal fewer than three places gives 320 or 32.

Remember:

- A conversion factor is a ratio of equal measurements, so it equals 1.
- Common customary facts: 12 in = 1 ft, 3 ft = 1 yd, 5,280 ft = 1 mi, 16 oz = 1 lb.
- Capacity: 2 cups = 1 pint, 2 pints = 1 quart, 4 quarts = 1 gallon (16 cups).
- Metric conversions use powers of 10, such as 1,000 m = 1 km.
- For multi-step conversions, chain factors or use a ratio table.