

Grade 6 - Converting Measurement Units with Ratios - Test Answer Key

Common Core 6.RP.A.3d · maths-pdf.fr/en/

This **unit conversions test answers** for 6th Grade covers converting measurement units with ratios (Common Core 6.RP.A.3d), with a free PDF to print.

Use this key to score the unit conversions test out of 20 points. Every solution is fully worked, and the scoring line explains how to award each point and partial credit.

Grade 6 · Common Core State Standards: **6.RP.A.3d**

Unit conversions test answers: worked solutions

Question 1 - Customary lengths [2 pts]

(a) $7 \times 3 = 21$ feet.

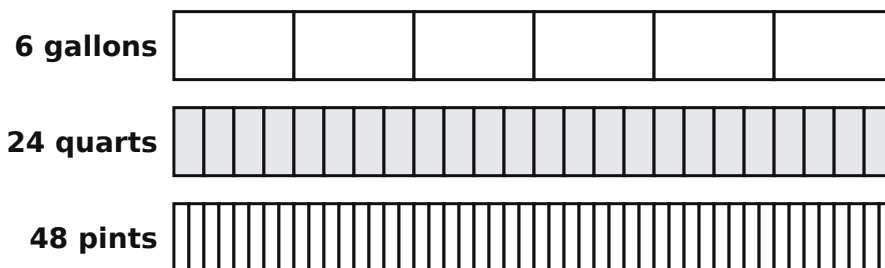
(b) $60 \div 12 = 5$ feet.

Scoring: 1 point for each conversion.

Question 2 - Capacity [2 pts]

Quarts: $6 \times 4 = 24$.

Pints: $24 \times 2 = 48$.



Six gallons shown in smaller units.

Scoring: 1 point for quarts; 1 point for pints.

Question 3 - Metric mass [2 pts]

(a) $4.8 \times 1000 = 4800$ g.

(b) $650 \div 1000 = 0.65$ kg.

Scoring: 1 point for each conversion.

Question 4 - Time [2 pts]

Minutes: $2 \times 60 + 15 = 135$.

Seconds: $135 \times 60 = 8100$.

Scoring: 1 point for minutes; 1 point for seconds.

Question 5 - Comparing [2 pts]

$3.2 \text{ L} = 3.2 \times 1000 = 3200$ mL.

$3500 > 3200$, so 3,500 mL is greater.

Scoring: 1 point for converting to the same unit; 1 point for the correct comparison.

Question 6 - Rate conversion [2 pts]

20 minutes = $\frac{20}{60} = \frac{1}{3}$ hour.

$18 \times \frac{1}{3} = 6$.

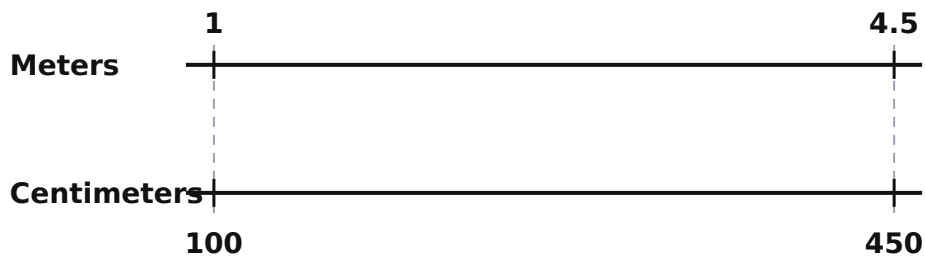
She rides 6 miles.

Scoring: 1 point for converting minutes to hours; 1 point for 6 miles.

Question 7 - Double number line [2 pts]

$4.5 \times 100 = 450$

4.5 meters = 450 centimeters.



Multiply by 100.

Scoring: 1 point for multiplying by 100; 1 point for 450.

Question 8 - Ribbon [3 pts]

4 yards = $4 \times 3 = 12$ feet.

$\$0.45 \times 12 = \$5.40$

The ribbon costs \$5.40.

Scoring: 1 point for converting to feet; 1 point for the multiplication setup; 1 point for \$5.40.

Question 9 - Water bottles [3 pts]

3 L = $3 \times 1000 = 3000$ mL.

$3000 \div 250 = 12$, with no remainder.

12 players can have a serving and 0 mL are left.

Scoring: 1 point for converting; 1 point for 12 players; 1 point for 0 mL left.

Total score

Total

20 points

Key facts behind this unit conversions test answers
--

Key facts

- A conversion factor is a ratio between two units, like 12 inches to 1 foot.
- Larger unit to smaller unit: multiply. Smaller to larger: divide.
- Metric conversions use 10, 100, and 1,000.
- Convert to the same unit before comparing amounts.
- Rates can be converted by converting each unit in turn.

How to use this unit conversions test answers

Score your test with the point values shown for each question. Then read the worked solution of every question where you lost points and note the method to review.