

Grade 6 · Converting Measurement Units · Test Answer Key

Common Core 6.RP.A.3d · mathovore.fr

This answer key gives worked solutions and a scoring guide for every question on the Grade 6 unit conversion test. Points are given for the correct conversion factor, accurate computation, and an answer with the right unit.

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

Question 1: Length and weight (2 points)

(a) $9 \times 12 = 108$ inches.

(b) $48 \div 16 = 3$ pounds.

(a) 108 in. (b) 3 lb.

Scoring: 1 point for each correct answer with its unit. Multiplying in part (b) earns no point.

Question 2: Capacity (2 points)

(a) $5 \times 2 = 10$ pints.

(b) 1 gallon is 16 cups, so $36 \div 16 = 2.25$ gallons.

(a) 10 pt. (b) 2.25 gal.

Scoring: 1 point for each correct answer. In part (b), award the point for 2.25 or $2\frac{1}{4}$.

Question 3: Metric units (2 points)

(a) $7.2 \times 1,000 = 7,200$ meters.

(b) $650 \div 100 = 6.5$ meters.

(a) 7,200 m. (b) 6.5 m.

Scoring: 1 point for each correct answer with its unit.

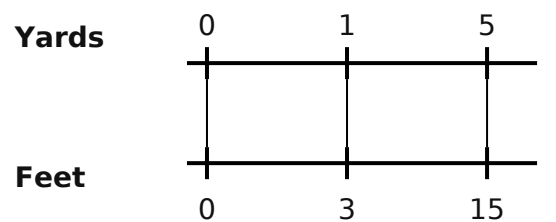
Question 4: Fabric (3 points)

(a) $5 \times 3 = 15$ feet.

(b) $15 \times 12 = 180$ inches. (Or $5 \times 36 = 180$.)

(a) 15 ft. (b) 180 in.

Scoring: (a) 1 point. (b) 1 point for a correct method such as multiplying feet by 12 or yards by 36, and 1 point for 180. Accept follow-through if part (a) is wrong but used correctly.



5 yards is 15 feet, and $15 \times 12 = 180$ inches.

Question 5: Backpack weight (3 points)

(a) $6.5 \times 16 = 104$ ounces.

(b) $104 - 100 = 4$ ounces.

(a) 104 oz. (b) 4 oz over the limit.

Scoring: (a) 1 point for multiplying by 16, 1 point for 104. (b) 1 point for 4; accept follow-through from part (a).

Question 6: Punch for a party (3 points)

(a) $3 \times 4 = 12$ cups, since 1 quart is 4 cups.

(b) 2 gallons = $2 \times 4 = 8$ quarts = $8 \times 4 = 32$ cups, so 32 servings.

(a) 12 cups. (b) 32 servings.

Scoring: (a) 1 point. (b) 1 point for a correct chain of conversions (or 16 cups per gallon), 1 point for 32.

Question 7: Walk to school (3 points)

(a) One day is a round trip: $0.75 + 0.75 = 1.5$ miles. $1.5 \times 5,280 = 7,920$ feet.

(b) $1.5 \times 5 = 7.5$ miles.

(a) 7,920 ft. (b) 7.5 mi.

Scoring: (a) 1 point for finding the round trip distance, 1 point for 7,920. (b) 1 point for 7.5; accept follow-through.

Question 8: Water bottles (2 points)

(a) $750 \div 1,000 = 0.75$ liter.

(b) 6 liters is 6,000 mL, and $6,000 \div 750 = 8$ bottles.

(a) 0.75 L. (b) 8 bottles.

Scoring: 1 point for each correct part.

Bottles	750	750	750	750	750	750	750	750
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Eight 750 mL bottles fill 6,000 mL, which is 6 L.

Total
20 points