

Percents as Rates per 100

Grade 6 math · Test Answer Key · Standards: 6.RP.A.3c

Each solution shows the expected steps and a scoring guide. Give partial credit when the method is right but an arithmetic slip changes the final number.

Standards: 6.RP.A.3c · **Level:** Grade 6

Question 1 Converting Forms (2 points)

a. $\frac{56}{100} = \frac{14}{25}$.

b. $7 \div 8 = 0.875 = \mathbf{87.5\%}$.

Scoring: 1 point for each part.

Question 2 Hundred Grid (2 points)

a. 64 of 100 squares: **64% and 0.64**.

b. $\frac{64}{100} = \frac{16}{25}$.

Scoring: 1 point for each part.

Question 3 Percent of a Number (2 points)

a. $0.45 \times 140 = \mathbf{63}$.

b. $0.06 \times 350 = \mathbf{21}$.

Scoring: 1 point for each part.

Question 4 Finding the Percent (2 points)

a. $18 \div 24 = 0.75$, which is **75%**.

b. $9 \div 60 = 0.15$, which is **15%**.

Scoring: 1 point for each part.

Question 5 Finding the Whole (2 points)

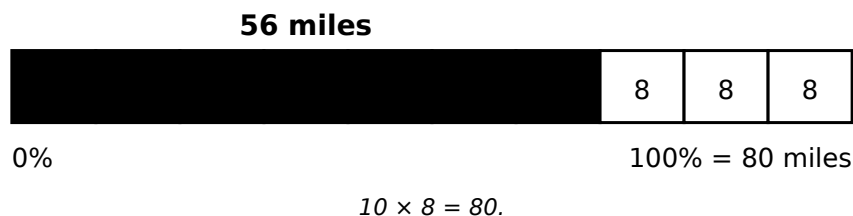
a. $27 \div 0.45 = \mathbf{60}$.

b. $36 \div 0.12 = \mathbf{300}$.

Scoring: 1 point for each part.

Question 6 Trail Length (3 points)

- a. $56 \div 0.70 = \mathbf{80 \text{ miles}}$ (one part is $56 \div 7 = 8$).
b. $80 - 56 = \mathbf{24 \text{ miles}}$.



Scoring: 2 points for (a), 1 point for a correct method with an arithmetic slip; 1 point for (b).

Question 7 Dinner Total (3 points)

Tax: $0.07 \times 48 = 3.36$. Tip: $0.20 \times 48 = 9.60$.

Total: $48 + 3.36 + 9.60 = 60.96$. **\$60.96**.

Scoring: 1 point for the tax, 1 point for the tip, 1 point for the total.

Question 8 Skateboard Prices (3 points)

Discount: $0.20 \times 75 = 15$, so the sale price is $75 - 15 = 60$.

$62 - 60 = 2$. **The sale costs \$2 less.**

Scoring: 1 point for the sale price, 1 point for the comparison, 1 point for the difference.

Question 9 Ordering (1 point)

As percents: 50%, 45%, 25%. Order: $\frac{1}{4}$, **45%**, **0.5**.

Scoring: 1 point for the correct order.