

Evaluating Formulas

Name _____

Key Concept and Vocabulary

Distance equals rate times time.



$$d = r \cdot t$$

Diagram showing 'distance' in a box with an arrow pointing down to the 'd' in the equation. 'rate' and 'time' are in boxes with arrows pointing up to the 'r' and 't' respectively.

$$\text{Rate} = 60 \text{ mi/h}$$

$$\text{Time} = 2 \text{ h}$$

$$\text{Distance} = 60 \frac{\text{mi}}{\text{h}} \cdot 2 \text{ h} = 120 \text{ mi}$$

Diagram showing 'rate' and 'time' in boxes with arrows pointing down to the corresponding terms in the equation. The 'h' in the denominator of the rate and the 'h' in the time term are crossed out.

The rate of a car is its speed.



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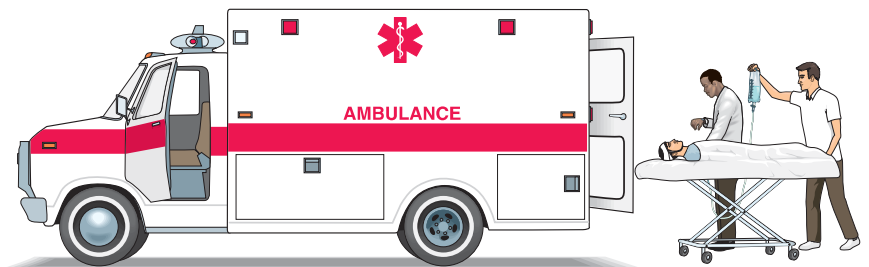
Check your answers at BigIdeasMath.com.

1. **AMBULANCE** The ambulance driver needs to drive 5 miles in 5 minutes. How fast should the driver drive?

$$5 \text{ min} = \frac{5}{60} \text{ h}$$

$$5 \text{ mi} = 60 \frac{\text{mi}}{\text{h}} \cdot \frac{5}{60} \text{ h}$$

Diagram showing 'rate' and 'time' in boxes with arrows pointing down to the corresponding terms in the equation. The '60' in the rate and the '5' in the time term are highlighted in yellow.



2. **FIRE TRUCK** The firefighter needs to drive 3 miles in 3 minutes. How fast should the firefighter drive?

$$3 \text{ min} = \frac{3}{60} \text{ h}$$

$$3 \text{ mi} = 60 \frac{\text{mi}}{\text{h}} \cdot \frac{3}{60} \text{ h}$$

Diagram showing 'rate' and 'time' in boxes with arrows pointing down to the corresponding terms in the equation. The '60' in the rate and the '3' in the time term are highlighted in yellow.

