

Solve Rate Problems

Solving Rate Problems: Use the equation $d = rt$ to solve rate problems. In order to solve for rate, you must be provided with the distance and the time of travel. Divide the distance by the time together to reach your answer for rate traveled.

Example 1: At what rate would you be traveling if you drive 100 miles in 10 hours?

$$d = rt$$

$$100 \text{ miles} = r(10 \text{ hrs})$$

$$\frac{100 \text{ miles}}{10 \text{ hrs}} = \frac{r(10 \text{ hrs})}{10 \text{ hrs}}$$

$$10 \text{ mph} = r$$

Example 2: Your flight to Florida is 1,600 miles and it takes you 4 hours to fly to Florida. How fast was the plane traveling?

$$d = rt$$

$$1600 \text{ miles} = r(4 \text{ hrs})$$

$$\frac{1600 \text{ miles}}{4 \text{ hrs}} = \frac{r(4 \text{ hrs})}{4 \text{ hrs}}$$

$$400 \text{ mph} = r$$

Try These:

1. Mike is driving to 2,700 miles to California. It is going to take Mike 54 hours to travel to California. How fast will Mike be traveling to get to California?
2. Sarah is riding her bike for 5 hours. If she travels 25 miles in the 5 hours, how fast is she traveling?
3. Kim is flying to Texas. Her flight is 5 hours and the distance she is flying is 3,000 miles. How fast is the plane traveling?
4. Becky is riding her ATV 26 miles to see the course for a marathon. If it takes her 2 hours to travel this distance, how fast is her ATV traveling?
5. Lacey bowls her ball down the 60 inch lane. Her ball takes 5 seconds to hit the pins, how fast is her ball traveling?