

Solve Time Problems

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

Example 1: How long will it take you to travel 150 miles if you are traveling at a rate of 10 mph?

$$d = rt$$

$$150 \text{ miles} = (10 \text{ mph})t$$

$$\frac{150 \text{ miles}}{10 \text{ mph}} = \frac{(10 \text{ mph})t}{10 \text{ mph}}$$

$$15 \text{ hrs} = t$$

Example 2: If you run a marathon for 26.2 miles at a rate of 10 mph, how long will it take you to complete the marathon?

$$d = rt$$

$$26.2 \text{ miles} = (10 \text{ mph})t$$

$$\frac{26.2 \text{ miles}}{10 \text{ mph}} = \frac{(10 \text{ mph})t}{10 \text{ mph}}$$

$$2.62 \text{ hrs} = t$$

Try These:

1. How long will it take Herb to fly 2500 miles at a rate of 250 mph?
2. If Monica drives 15 miles to school at a speed of 45 mph, how long is her trip?
3. Hope is planning a trip to the beach. If she drives at a rate of 55 mph and her trip is 110 miles, how long will her trip take?
4. Bill drives his lawn tractor at a rate of 7 mph for 3 miles to mow his property. How long does it take Bill to mow his lawn?
5. Jasmine walks her dog at a rate of 6 miles per hour. How long will it take Jasmine to walk her dog 12 miles?