

**Solve Distance Problems**

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

**Example 1:** John can ride his bike at a rate of 12 mph. How far will John travel if he bikes for 3 hours?

$$d = rt$$

$$d = (12mph)(3hrs)$$

$$d = 36 \text{ miles}$$

**Example 2:** Erica swims at a rate of 4 meters per hour. If Erica swims for 2 hours, how many meters did she complete?

$$d = rt$$

$$d = (4\text{meters per hr})(2hrs)$$

$$d = 8 \text{ meters}$$

**Try These:**

1. How far can a boat travel if it maintains a speed of 25 mph for 5 hours?
2. If you are traveling in your car at 55 mph to the beach, how far away is the beach if it took you 4 hours to get there?
3. Juan can run at a rate of 15 mph and the most he can run for is 3 hours. What is the maximum distance Juan can run?
4. Mrs. Brodbeck speeds to school at a dangerous rate of 95 mph because she can't wait to educate her students. It takes her 1 hour to get to school, how far away does she live?
5. If Mrs. Gladfelter drives at a rate of 40 mph to the gym and it takes her  $\frac{1}{2}$  hour to get there, how far has she traveled?