

Math Skills **LESSON 2**

Solve for Average Speed

If a moving object changes speed, its average speed can be calculated. Average speed is the total distance traveled divided by the total time taken to travel that distance. This can be shown by the equation below, where v = average speed, d = distance, and t = time.

$$v = \frac{d}{t}$$

If Maria runs **6 km** in **1.5 hours**, what is her average speed?

Step 1 Identify the variables given in the problem.

$$d = \mathbf{6 \text{ km}}$$

$$t = \mathbf{1.5 \text{ h}}$$

Step 2 Substitute the known values to solve the equation.

You are solving for v , the average speed.

$$v = \frac{d}{t}$$

$$v = \frac{\mathbf{6 \text{ km}}}{\mathbf{1.5 \text{ hours}}}$$

$$v = \mathbf{4 \text{ km/h}}$$

Practice

1. It takes Francisco 15 minutes to ride his bicycle 4 km, which is the distance from home to school. What is his average speed?
2. Sara takes a 40-minute bus ride from her home to her grandparents' home, which is 8 km away. What is the average speed of the bus?
3. Byun walked 15 blocks in 25 minutes. What was his average speed?
4. A bus trip covers 191 km and takes 4 hours and 15 minutes. What is the average speed of the bus in kilometers per hour?