

Name: _____

Skill Sheet 1

Speed Problems



This skill sheet will allow you to practice solving speed problems. To determine the speed of an object you need to know the distance traveled and the time taken to travel that distance. However, by rearranging the formula for speed, $v = d/t$, you can also determine the distance traveled or the time it took for the object to travel that distance, if you know the speed. For example,

Equation...	Gives you...	If you know...
$v = d/t$	speed	time and distance
$d = v \times t$	distance	speed and time
$t = d/v$	time	distance and speed

1. Solving problems

Solve the following problems using the speed equation. The first problem is done for you.

1. What is the speed of a cheetah that travels a total of 112.0 meters in 4.0 seconds?

$$\text{speed} = \frac{d}{t} = \frac{112.0 \text{ m}}{4.0 \text{ sec}} = \frac{28 \text{ m}}{\text{sec}}$$

2. A bicycle rider travels 60.0 kilometers in 3.5 hours. What is the cyclist's average speed?
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3. What is the average speed of the car that traveled a total of 300.0 miles in 5.5 hours?
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4. How much time would it take for the sound of thunder to travel 1,500 meters if sound travels at the speed of 330 m/s?
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5. How much time would it take for an airplane to reach its destination if it traveled at an average speed of 790 kilometers/hour for a distance of 4,700 kilometers?
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