

Name

Speed, Velocity and Acceleration

1. What is speed?
2. What is velocity?
3. What is acceleration?

The formula used to calculate speed or velocity is (distance / time). For the following questions calculate the unknown. **Make sure you write down the correct units. Go to two decimal places for your answers if needed.**

	Distance	Time	speed
4	10 m	5 s	
5	50 m	7 s	
6	52 cm	8 minutes	
7		9 hours	7 miles/hour
8		1.5 days	18 mm/day
9	17 miles		2 miles/second
10	81 inches		7 inches/minute

11. What would I need to add to all of the speeds to change them to velocities?
12. You are in a car that is traveling at 70 miles an hour. Over the next hour, the driver slows down to 60 miles an hour. What is the acceleration/deceleration of the car over that hour?
13. You are walking in the hallway at 2 meters a minute when you realize you are almost late for class. When you reach your next class you are walking at 10 meters a minute. If it took you 2

minutes to get to class after you realized you were late, what was your acceleration/deceleration over those two minutes?

14. A boulder is sitting at the top of a mountain when someone pushes it down the side of the mountain. If the boulder is traveling at 10 meters per second when it hits the bottom, what is its acceleration/deceleration if it traveled for 5 seconds?

15. What is its acceleration/deceleration if it traveled for 20 seconds?