## Speed and Acceleration continued

1. What is the formula for speed?
2. What is the formula for acceleration?
3. A cheetah can run at a top speed of 93 kilometers per hour. If the cheetah ran for 3 hours at top speed, how far would it have run?
4. If you ran 800 meters in 20 seconds how fast did you run?
5. A snail is moving at a rate of 15 feet per day. How long would it take if a snail traveled 35 feet?
6. A baseball is thrown at 15 meters per second. If it takes the outfielder a minute to grab the ball, how are did it travel?
7. If you are driving in Chicago and it takes you 4 hours to drive 42 miles, what is your speed?
8. How many minutes would it take you to drive 4 miles if you are traveling at 1.2 miles per minute?
9. If you are driving along at a speed of 5 miles per hour and you speed up to 35 miles per hour. If it took you 4 seconds to speed up, what is your acceleration?
10. A roller coasters velocity at the top of the hill is $10 \mathrm{~m} / \mathrm{s}$. Two seconds later it reaches the bottom of the hill with a velocity of $26 \mathrm{~m} / \mathrm{s}$. What is the acceleration of the coaster?
11. A car goes from a stop to $30 \mathrm{~km} / \mathrm{s}$ in 25 seconds. What is the acceleration?
12. How long will it take a car to go from 0 to $44 \mathrm{~km} / \mathrm{hr}$ if they are accelerating at $5 \mathrm{~km} / \mathrm{hr} 2$ ?
