Calculating Speed, Velocity, and Acceleration

Use a calculator to calculate the speed. Don't forget to have correct units in your final answer!

Speed	Distance	Time
20 km/h	600 km	30 hr
12 miles/h	144 miles	12 hr
4 miles/min	96 miles	24 min
320 meters/minute	1280 meters	4 min
4km/min	96 km	24 min
70 mi/hr	210 miles	3 hr

Find the velocity in the problems below.

A Mexican free tail bat flies 760 miles from Austin to Mexico in 19 hours. What is its **velocity**?

Speed = Distance

Time   760 ÷ 19 =   40 miles per hour SOUTH

Charles Lindbergh was the first person to fly across the Atlantic Ocean. In May 1927, he piloted his plane, *The Spirit of St. Louis*, 3600 miles from New York to Paris. It took him 33.5 hours. What was his **velocity**?

Speed = Distance
          Time   3600 ÷ 33.5 = 107.5 MILES PER HOUR EAST

Find the acceleration in the problems below.

Acceleration = FINAL velocity - INITIAL velocity
Time

During a track meet, a runner accelerates from 8 meters/second to 10 meters/second in 5 seconds to finish the race. What is her acceleration?
.4 m/sec/sec

Going north on a country road, a car accelerates from
35 kilometers/hour to 75 kilometers/hour in 20 seconds. Find its average

= 2 km/hr/sec

A cop tracks your speed for 10 seconds and finds that you accelerated from 55 miles/hour to 75 miles/hour. At what rate did you **accelerate**?
2 miles/hour/second