

Distance Problems for You

1. Two bicycles start at the same point traveling in the opposite direction. The speed of the second bike in miles per hour is 12 less than three times the first. At the end of 6 hours, the bicycles are 144 miles apart. Find the speed of each bicycle.
2. Two trains leave Winter Park terminal traveling in the opposite direction. The southbound train leaves at 8:00 AM. The northbound train leaves at 10:00 AM traveling 20 mph faster than the southbound train. At 2:00 PM the trains are 600 miles apart. Find the speed of each train.
3. A Central Railway freight train leaves a station and travels due north at a speed of 60 mph. One hour later, an Amtrak passenger train leaves the same station and travels due north on a parallel track at a speed of 80 mph. How long will it take the passenger train to overtake the freight train?
4. America West Airlines' fleet includes Boeing 737-200's, each with a cruising speed of 500 mph, and Bombardier deHavilland Dash 8-200's, each with a cruising speed of 302 mph (*Source: America West Airlines*). Suppose that a Dash 8-200 takes off and travels at its cruising speed. One hour later, a 737-200 takes off and follows the same route, traveling at its cruising speed. How long will it take the 737-200 to overtake the Dash 8-200?

Answers to "Distance" Problems:

1. 9 mph for the first bike and 15 mph for the second bike
2. 52 mph southbound and 72 mph northbound
3. 3 hours
4. 765 miles (round the time to two decimal places)