

Practice Problems:

1. A freight train starts from Los Angeles and heads for Chicago at 40 mph. Two hours later a passenger train leaves the same station for Chicago traveling at 60 mph. How long will it be before the passenger train overtakes the freight train?

4 hours

Commented [1]: Be sure to show your work in terms of how you arrived at your answer.

2. A car leaves San Francisco for Los Angeles traveling an average of 70 mph. At the same time, another car leaves Los Angeles for San Francisco traveling 60 mph. If it is 520 miles between San Francisco and Los Angeles, how long before the two cars meet, assuming that each maintain its average speed?

70 mph + 60 mph = 130 mph, 520 divided by 130 = 4 hours

Commented [2]: Good work for items 2-4! Did you get help with these one?

3. Two planes leave New York at 10 am, one heading for Europe at 600 mph and one heading in the opposite direction at 150 mph. (so it isn't a jet) At what time will they be 900 miles apart? /How far has each traveled?

600 mph + 150 mph = 750 mph after one hour, 900 divided by 750 = 1.2 miles

4. Mr. Derbyshire makes a business trip from his house to Loganville in 2 hours. One hour later, he returns home in traffic at a rate 20 mph less than his rate going. If Mr. Derbyshire is gone a total of 6 hours, how fast did he travel on each leg of the trip?

60 - 20 = 40 mph, 60 going, 40 coming back, 6 - 3 = 3 hours to and from

5. Jake and Jerry went on a camping trip with their motorcycles. One day, Jerry left camp on his motorcycle to go to the village. Ten minutes later Jake decided to go too. If Jerry was traveling 30 mph and Jake traveled 35 mph, how long was it before Jake caught up with Jerry?

10 + 35

Commented [3]: Be sure to show your work.

