

Math Exercise for M.3

Time and Travel

1. A plane takes 6 hours to fly from San Francisco to New York, and 5 hours to return back. The airplane's airspeed is 550 miles per hour, from New York to San Francisco. The reason why it takes the airplane longer to go West than East is because of a wind with constant wind speed. What is the speed of wind.

Ans.....

2. At the same moment, two trains leave Chicago and New York. They move towards each other with constant speeds. The train from Chicago is moving at speed of 40 miles per hour, and the train from New York is moving at speed of 60 miles per hour. The distance between Chicago and New York is 1000 miles. How long after their departure will they meet?

Ans.....

3. A freight train leaves a station traveling at 30 mph A passenger train leaves 1 hours later traveling at 50 mph. At what time will the passenger train overtake the freight train?

Ans.....

4. A barge has speed over water of 5 miles per hour. A river flows downstream at the speed of 1 miles per hour. How long will it take the barge to go from point A to point B upstream, and then back, if the distance from A to B is 24 miles?

Ans.....

5. Jim and Sarah who are hiking in wilderness, decide to leave their tent and walk around a lake. They start going in the opposite directions. Jim hikes at the rate of 3 miles per hour. Sarah hikes at the rate of 2 miles per hour. The perimeter of the lake is 10 miles. How long will it be before they meet?

Ans.....

6. A plane takes 6 hours to fly from San Francisco to New York, and 5 hours to return back. The wind velocity is 50 miles per hour, from New York to San Francisco. What is the speed of the airplane.

Ans.....

7. A freight train and an express train leave towns 390km apart, traveling toward one another. The freight train travels 30km per hr slower than the express train. They pass another 3 hr. later. What are their speeds!

Ans.....

8. A man is traveling up a hill at 30 mph and immediately returns down. His average speed for the whole trip is 45 mph. What is the man's speed going down the hill?

Ans.....

9. Two planes leave O'Hare Airport in Chicago at the same time. One flies directly east at 540 mph. The other flies directly west at 720 mph. How long will it take them to be 1890 miles apart?

Ans.....

10. Two cars leave town at the same time going in opposite directions. one travels at 35 km/h and the other at 55 km/h. in how many hours will they be 200 km apart?

Ans.....