

J Q ADAMS

1. A bicyclist rode up a mountain road at 12 km/h and then back down at 30 km/h. If the round trip took 3.5 h, how long did the ride up the mountain take?
2. A car leaves a town traveling at 72 km/h. An hour later, a second car leaves the same town, on the same road, traveling at 90 km/h. In how many hours will the second car overtake the first?
3. Two cars start at the same time from the same point and travel in opposite directions. One car travels 10 mi/h faster than the other. In 3 hours they are 300 miles apart. Find the rate of each car.
4. Two airplanes leave Chicago at 12 noon, one traveling west at 575 km/h and the other east at 625 km/h. At what time will they be 3000 km apart?
5. Two cyclists start from the same point and ride in opposite directions. One cyclist rides twice as fast as the other. In three hours they are 90 km apart. What is the rate of each cyclist?
6. A motorist driving 90 km/h can go from Midland to Shiloh in two hours less time than a train that averages 75 km/h. How far apart are the two towns?
7. Two drivers leave Omaha at the same time, one driving east and the other west. The average speed of the eastbound car is 12 km/h more than the speed of the other car. After 2 h, the cars are 336 km apart. What are their speeds?
8. Two jets leave Chicago at 8 A.M., one traveling north at 650 km/h and the other south at 750 km/h. At what time will they be 3500 km apart?
9. Two jets leave St. Louis at 8:00 a.m., one flying east at a speed 40 km/h greater than the other, which is traveling west. At 10:00 a.m. the planes are 2480 km apart. Find their speeds.
10. Two jets leave Ontario at the same time, one flying east at a speed 20 km/h greater than the other, which is flying west. After 4 h, the planes are 6000 km apart. Find their speeds.
11. A car started out from Memphis toward Little Rock at the rate of 60 km/h. A second car left from the same point 2 h later and drove along the same route at 75 km/h. How long did it take the second car to overtake the first car?
12. A tourist bus leaves Richmond at 1:00 p.m. for New York City. Exactly 24 min later, a truck sets out in the same direction. The tourist bus moves at a steady 60 km/h. The truck travels at 80 km/h. How long does it take the truck to overtake the tourist bus?
13. Exactly 20 min after Alex left home, his sister Alison set out to overtake him. Alex drove at 48 mph and Alison drove at 54 mph. How long did it take Alison to overtake Alex?