Rate of change

Name_____

Date_____

1) Matt made a trip to the ferry office and back. The trip there took five hours and the trip back took four hours. He averaged 14 km/h faster on the return trip than on the outbound trip. What was Matt's average speed on the outbound trip?

2) A passenger plane left Singapore and flew east. Five hours later a cargo plane left flying 225 mph faster in an effort to catch up to it. After four hours the cargo plane finally caught up. Find the passenger plane's average speed.

3) Carlos made a trip to the town hall and back. The trip there took three hours and the trip back took two hours. He averaged 75 km/h on the return trip. Find the average speed of the trip there.

4) A fishing boat left Diego Garcia 11 hours before an aircraft carrier. The vessels traveled in opposite directions. The aircraft carrier traveled at 19 mph for two hours. After this time the vessels were 428 mi. apart. What was the fishing boat's speed?

5) Mary left school traveling toward the dump three hours before Pranav. Pranav traveled in the opposite direction going 30 mph slower than Mary for one hour after which time they were 245 mi. apart. How fast did Mary travel?

6) A passenger plane and a cargo plane left New York at the same time. The planes flew in opposite directions. The cargo plane flew 125 mph faster than the passenger plane. After nine hours they were 6723 mi. apart. Find the passenger plane's speed.

7) Mary left the mall and traveled toward the ocean. One hour later Trevon left traveling at 70 mph in an effort to catch up to Mary. After traveling for four hours Trevon finally caught up. What was Mary's average speed?

8) A freight train left Washington traveling north 11 hours before a passenger train. The passenger train traveled in the opposite direction going 17 km/h faster than the freight train for four hours after which time the trains were 847 km apart. Find the freight train's speed.

9) A cattle train traveled to the outer-most station and back. The trip there took three hours and the trip back took 20 hours. It averaged 12 mph on the return trip. Find the average speed of the trip there.

10) An Air Force plane flew to Las Vegas and back. The trip there took six hours and the trip back took ten hours. It averaged 240 km/h on the return trip. Find the average speed of the trip there.

11) A cruise ship left Port 35 five hours before a container ship. The vessels traveled in opposite directions. The container ship traveled at 5 km/h for five hours. After this time the vessels were 145 km apart. What was the cruise ship's speed?

12) Chelsea left the science museum two hours before Jessica. They traveled in opposite directions. Jessica traveled at 35 mph for four hours. After this time they were 590 mi. apart. Find Chelsea's speed.

Answers to Rate of change

1) 56 km/h
2) 180 mph
3) 50 km/h
4) 30 mph
5) 55 mph
6) 311 mph
7) 56 mph
8) 41 km/h
9) 80 mph
10) 400 km/h
11) 12 km/h
12) 75 mph