Distance Problems – Day 3
Unit 5: Real World Applications

Solve each question. Round your answer to the nearest hundredth when needed.

1. Amy left home and traveled toward her cabin on the lake at an average speed of 35 mph. Sometime later Chad left traveling in the opposite direction with an average speed of 55 mph. After Amy had traveled for two hours, they were 180 miles apart. How long did Chad travel?

2. Ellie left Coen's house and traveled toward the capital at an average speed of 50 km/h. Sometime later Shawna left traveling in the opposite direction with an average speed of 30 km/h. After Ellie had traveled for six hours they were 390 km apart. How long did Shawna travel?

3. Travares left the hardware store driving toward the ocean one hour before John. John drove in the opposite direction going 20 km/h faster than Travares for two hours after which time they were 165 km apart. What was Travares' speed?

4. A diesel train left Montana and traveled toward New York at an average speed of 23.7 km/h. A cattle train left sometime later traveling in the opposite direction with an average speed of 49.2 km/h. After the diesel train had traveled for 17 hours the trains were 771.9 km apart. How long did the cattle train travel?

5. Jill left the movie theater and drover toward her friend's house at an average speed of 59.5 mph. Sometime later Molly left driving in the opposite direction with an average speed of 26.4 mph. After Jill had driven for 3.4 hours, they were 228.7 miles apart. How long did Molly drive?

6. Natalie left the movie theater at the same time as Nikki. They traveled in opposite directions. Nikki traveled at a speed of 71.7 mph. After six hours, they were 680.4 miles apart. How fast did Natalie travel?

7. Trevor drove to the lake and back. It took three hours less time to get there than it did to get back. The average speed on the trip there was 75 km/h. The average speed on the way back was 30 km/h. How many hours did the trip there take?

8. Rebecca made a trip to the lake and back. On the trip there she drove 48 mph and on the return trip she went 64 mph. How long did the trip there take if the return trip took three hours?

9. Mark made a trip to his cabin on the lake and back. The trip there took four hours, and the trip back took six hours. He averaged 25 km/h faster on the trip there than on the return trip. What was Mark's average speed on the outbound trip?

10. Jasmine drove to her cabin on the lake and back. On the trip there she drove 75.6 mph and on the return trip she went 40.5 mph. How long did the trip there take if the return trip took 2.8 hours?

11. An aircraft carrier traveled to Tahiti and back. On the trip there was traveled 25.9 mph and on the return trip it went 18.5 mph. How long did the trip there take if the return trip took 12.6 hours?

12. Jack made a trip to the lake and back. The trip there took 3.8 hours, and the trip back took 3.2 hours. What was Jack's average speed on the trip there if he averaged 57 mph on the return trip?

13. Molly left the airport and traveled toward the mountains at an average speed of 20 km/h. Sometime later Perry left traveling in the same direction but at an average speed of 50 km/h. After traveling for two hours Perry caught up with Molly. Find the number of hours Molly traveled before Perry caught up.

14. Adam left home and traveled toward the train station at an average speed of 40 mph. Ryan left one hour later and traveled in the same direction but with an average speed of 50 mph. How long did Adam travel before Ryan caught up?

15. An aircraft carrier left Port 23 and traveled east. A container ship left one hour later traveling at 22 km/h in an effort to catch up to the aircraft carrier. After traveling for ten hours the container ship finally caught up. What was the aircraft carrier's average speed?

16. Lisa left the science museum and traveled toward the capital at an average speed of 31 km/h. Michael left 0.7 hours later and traveled in the same direction but with an average speed of 38 km/h. Find the number of hours Lisa traveled before Michael caught up.

17. A diesel train left Miami and traveled west at an average speed of 21.6 km/h. A cattle train left 1.8 hours later and traveled in the same direction but with an average speed of 24 km/h. Find the number of hours the diesel train traveled before the cattle train caught up.

18. Brenda left the movie theater and drove toward the dump. Half an hour later Katie left driving 10 km/h faster in an effort to catch up to her. After 2.1 hours Katie finally caught up. Find Brenda's average speed.