

Assignment

- 1) A passenger train left the station and traveled toward the repair yards at an average speed of 29.2 km/h. A cattle train left 2.4 hours later and traveled in the same direction but with an average speed of 36.5 km/h. How long did the passenger train travel before the cattle train caught up?
- 2) Bill left the airport and drove toward the ocean at an average speed of 35 km/h. Arjun left 1.1 hours later and drove in the same direction but with an average speed of 52.5 km/h. Find the number of hours Bill drove before Arjun caught up.
- 3) Krystal left the movie theater and traveled toward the ferry office. Aliyah left 0.3 hours later traveling 14 mph faster in an effort to catch up to her. After 0.6 hours Aliyah finally caught up. What was Krystal's average speed?
- 4) Jennifer drove to her cabin on the lake and back. It took 0.8 hours longer to go there than it did to come back. The average speed on the trip there was 34.8 km/h. The average speed on the way back was 43.5 km/h. How many hours did the trip there take?
- 5) A cattle train left Berlin and traveled toward New York at an average speed of 24 mph. A passenger train left seven hours later and traveled in the same direction but with an average speed of 84 mph. How long did the cattle train travel before the passenger train caught up?
- 6) A passenger plane made a trip to Las Vegas and back. The trip there took 4.4 hours and the trip back took six hours. It averaged 79.6 km/h faster on the trip there than on the return trip. Find the passenger plane's average speed on the outbound trip.
- 7) A cargo plane left Rome and flew south at an average speed of 168 mph. A passenger plane left 1.5 hours later and flew in the same direction but with an average speed of 268.8 mph. How long did the cargo plane fly before the passenger plane caught up?
- 8) A diesel train made a trip to Las Vegas and back. The trip there took eight hours and the trip back took 11.4 hours. It averaged 18.7 km/h faster on the trip there than on the return trip. What was the diesel train's average speed on the outbound trip?
- 9) Ted made a trip to the recycling plant and back. The trip there took 4.5 hours and the trip back took 3.6 hours. He averaged 12.5 km/h faster on the return trip than on the outbound trip. Find Ted's average speed on the outbound trip.
- 10) Julio traveled to the lake and back. It took 0.8 hours less time to get there than it did to get back. The average speed on the trip there was 32.2 km/h. The average speed on the way back was 21 km/h. How many hours did the trip there take?



- 11) Maria left the mall traveling toward the mountains 1.1 hours before Dan. Dan traveled in the opposite direction going 16.5 mph slower than Maria for 2.9 hours after which time they were 355.8 mi. apart. Find Maria's speed.
- 12) An aircraft carrier traveled to St. Vincent and back. The trip there took 1.3 hours and the trip back took two hours. It averaged 6.3 mph faster on the trip there than on the return trip. What was the aircraft carrier's average speed on the outbound trip?
- 13) A passenger plane flew to Jakarta and back. It took 1.5 hours less time to get there than it did to get back. The average speed on the trip there was 330.4 mph. The average speed on the way back was 283.2 mph. How many hours did the trip there take?
- 14) Ashley traveled to her cabin on the lake and back. It took three hours longer to go there than it did to come back. The average speed on the trip there was 21 mph. The average speed on the way back was 52.5 mph. How many hours did the trip there take?
- 15) Chelsea and Amanda left school at the same time. They traveled in opposite directions. Amanda traveled 4.4 km/h faster than Chelsea. After 2.5 hours they were 219 km apart. Find Chelsea's speed.
- 16) Daniel left Wilbur's house driving toward the lake 1.3 hours before Jasmine. Jasmine drove in the opposite direction going 8.6 km/h slower than Daniel for 2.2 hours after which time they were 412 km apart. What was Daniel's speed?
- 17) Ryan left the White House and drove toward the train station at an average speed of 20.5 km/h. Jacob left at the same time and drove in the opposite direction with an average speed of 75 km/h. How long does Jacob need to drive before they are 439.3 km apart?
- 18) A freight train left Washington and traveled north at an average speed of 56 km/h. A diesel train left 1.2 hours later and traveled in the same direction but with an average speed of 67.2 km/h. Find the number of hours the freight train traveled before the diesel train caught up.
- 19) A jet left Sydney and flew north at an average speed of 286.3 mph. An Air Force plane left 1.5 hours later and flew in the same direction but with an average speed of 409 mph. How long did the jet fly before the Air Force plane caught up?
- 20) A fishing boat left Port 58 and traveled toward Tahiti. A cruise ship left 1.7 hours later traveling 5.1 mph faster in an effort to catch up to it. After 5.8 hours the cruise ship finally caught up. What was the fishing boat's average speed?
- 21) Kathryn left the mall and drove toward the capital at an average speed of 64 km/h. Ted left 0.3 hours later and drove in the same direction but with an average speed of 72 km/h. Find the number of hours Kathryn drove before Ted caught up.
- 22) A container ship left Port 20 and traveled toward Guam at an average speed of 27.7 mph. An aircraft carrier left 0.5 hours later and traveled in the opposite direction with an average speed of 5.2 mph. Find the number of hours the aircraft carrier needs to travel before the ships are 392.2 mi. apart.



23) Arjun left the science museum and drove north. 2.1 hours later Mark left driving 24.5 km/h faster in an effort to catch up to him. After 3.3 hours Mark finally caught up. What was Arjun's average speed?

24) A cruise ship left the Azores and traveled south. A submarine left 0.7 hours later traveling 0.7 km/h faster in an effort to catch up to it. After five hours the submarine finally caught up. Find the cruise ship's average speed.



Answers to Assignment (ID: 1)

1) 12 hours

5) 9.8 hours

9) 50 km/h

13) 9 hours

17) 4.6 hours

21) 2.7 hours

2) 3.3 hours

6) 298.5 km/h

10) 1.5 hours

14) 5 hours

18) 7.2 hours

22) 11.5 hours

3) 28 mph

7) 4 hours

11) 58.5 mph

15) 41.6 km/h

19) 5 hours

23) 38.5 km/h

4) 4 hours

8) 62.7 km/h

12) 18 mph

16) 75.6 km/h

20) 17.4 mph

24) 5 km/h



Assignment

- 1) A container ship left the Dania Pier and traveled toward a navigational buoy. An aircraft carrier left 0.7 hours later traveling 1.4 km/h faster in an effort to catch up to it. After four hours the aircraft carrier finally caught up. What was the container ship's average speed?
- 2) A passenger plane flew to Dublin and back. It took 2.3 hours less time to get there than it did to get back. The average speed on the trip there was 218 mph. The average speed on the way back was 172 mph. How many hours did the trip there take?
- 3) A fishing boat made a trip to dry dock and back. The trip there took 5.4 hours and the trip back took 4.5 hours. It averaged 2.5 mph faster on the return trip than on the outbound trip. Find the fishing boat's average speed on the outbound trip.
- 4) Mary made a trip to the train station and back. The trip there took 2.3 hours and the trip back took 3.7 hours. She averaged 28 mph faster on the trip there than on the return trip. Find Mary's average speed on the outbound trip.
- 5) Lisa drove to her cabin on the lake and back. It took 2.1 hours less time to get there than it did to get back. The average speed on the trip there was 78 mph. The average speed on the way back was 32.5 mph. How many hours did the trip there take?
- 6) Paul drove to the ferry office and back. It took 2.8 hours less time to get there than it did to get back. The average speed on the trip there was 50 km/h. The average speed on the way back was 22 km/h. How many hours did the trip there take?
- 7) Amy traveled to the recycling plant and back. It took 0.8 hours less time to get there than it did to get back. The average speed on the trip there was 48 km/h. The average speed on the way back was 24 km/h. How many hours did the trip there take?
- 8) A passenger plane flew to Las Vegas and back. The trip there took five hours and the trip back took 11 hours. It averaged 231 km/h faster on the trip there than on the return trip. What was the passenger plane's average speed on the outbound trip?
- 9) Shawna left the hardware store and traveled east at an average speed of 47.6 km/h. Mary left at the same time and traveled in the opposite direction with an average speed of 68.6 km/h. How long does Mary need to travel before they are 464.8 km apart?
- 10) Jill left school and traveled toward the ferry office at an average speed of 23.2 mph. Heather left 2.7 hours later and traveled in the opposite direction with an average speed of 47.5 mph. How long does Heather need to travel before they are 260.6 mi. apart?
- 11) Mark left the movie theater and drove toward the lake at an average speed of 41.8 mph. Mike left at the same time and drove in the opposite direction with an average speed of 71 mph. How long does Mike need to drive before they are 225.6 mi. apart?
- 12) Jenny left the White House driving toward the capital 0.9 hours before Totsakan. Totsakan drove in the opposite direction going 4.5 mph slower than Jenny for 2.2 hours after which time they were 339.9 mi. apart. How fast did Jenny drive?



- 13) A freight train left Seoul and traveled toward the repair yards. 12.3 hours later a diesel train left traveling 61.5 mph faster in an effort to catch up to it. After 5.2 hours the diesel train finally caught up. What was the freight train's average speed?
- 14) A submarine left the Dania Pier and traveled south at an average speed of 13.9 km/h. A cruise ship left at the same time and traveled in the opposite direction with an average speed of 21.2 km/h. How long does the cruise ship need to travel before the vessels are 70.2 km apart?
- 15) A container ship left Port 31 traveling north 1.2 hours before an aircraft carrier. The aircraft carrier traveled in the opposite direction going 3.1 km/h slower than the container ship for 0.8 hours after which time the ships were 74.8 km apart. Find the container ship's speed.
- 16) An Air Force plane left New York flying east 1.2 hours before a jet. The jet flew in the opposite direction going 88.5 km/h slower than the Air Force plane for 10.4 hours after which time the planes were 4997.6 km apart. Find the Air Force plane's speed.
- 17) Kayla left the airport and traveled toward her friend's house. 0.1 hours later Ming left traveling 4.5 mph faster in an effort to catch up to her. After 1.2 hours Ming finally caught up. Find Kayla's average speed.
- 18) Stephanie left the science museum and drove toward the desert at an average speed of 56 mph. Kathryn left 0.9 hours later and drove in the same direction but with an average speed of 70.4 mph. How long did Stephanie drive before Kathryn caught up?
- 19) Scott left the movie theater and traveled toward the lake at an average speed of 22.5 mph. Aliyah left 1.5 hours later and traveled in the same direction but with an average speed of 35 mph. How long did Scott travel before Aliyah caught up?
- 20) A cruise ship traveled to dry dock and back. It took 3.1 hours less time to get there than it did to get back. The average speed on the trip there was 13.1 km/h. The average speed on the way back was 10 km/h. How many hours did the trip there take?
- 21) A freight train traveled to Las Vegas and back. The trip there took 3.8 hours and the trip back took six hours. It averaged 14.3 mph faster on the trip there than on the return trip. Find the freight train's average speed on the outbound trip.
- 22) A cargo plane left Sydney and flew toward Dublin at an average speed of 319.8 km/h. A passenger plane left 0.1 hours later and flew in the same direction but with an average speed of 328 km/h. How long did the cargo plane fly before the passenger plane caught up?
- 23) Imani left Mary's house and traveled toward the lake at an average speed of 51 km/h. Castel left 0.8 hours later and traveled in the same direction but with an average speed of 64.6 km/h. How long did Imani travel before Castel caught up?
- 24) Molly made a trip to her friend's house and back. The trip there took five hours and the trip back took 2.6 hours. She averaged 36 km/h faster on the return trip than on the outbound trip. Find Molly's average speed on the outbound trip.



Answers to Assignment (ID: 2)

- 1) 8 km/h
- 5) 1.5 hours
- 9) 4 hours
- 13) 26 mph
- 17) 54 mph
- 21) 39 mph

- 2) 8.6 hours
- 6) 2.2 hours
- 10) 2.8 hours
- 14) 2 hours
- 18) 4.4 hours
- 22) 4 hours

- 3) 12.5 mph
- 7) 0.8 hours
- 11) 2 hours
- 15) 27.6 km/h
- 19) 4.2 hours
- 23) 3.8 hours

- 4) 74 mph
- 8) 423.5 km/h
- 12) 66 mph
- 16) 269 km/h
- 20) 10 hours
- 24) 39 km/h



Assignment

- 1) Shreya drove to the recycling plant and back. It took 0.6 hours longer to go there than it did to come back. The average speed on the trip there was 54 mph. The average speed on the way back was 70.2 mph. How many hours did the trip there take?
- 2) Stefan drove to the ferry office and back. The trip there took two hours and the trip back took 2.5 hours. He averaged 13.9 mph faster on the trip there than on the return trip. What was Stefan's average speed on the outbound trip?
- 3) A passenger train made a trip to Las Vegas and back. The trip there took 14.5 hours and the trip back took 9.8 hours. It averaged 9.4 mph faster on the return trip than on the outbound trip. What was the passenger train's average speed on the outbound trip?
- 4) A container ship and an aircraft carrier left Port 54 at the same time. The ships traveled in opposite directions. The aircraft carrier traveled 19.5 mph faster than the container ship. After 12 hours they were 411.6 mi. apart. Find the container ship's speed.
- 5) Jimmy traveled to the train station and back. It took one hour less time to get there than it did to get back. The average speed on the trip there was 56 km/h. The average speed on the way back was 36 km/h. How many hours did the trip there take?
- 6) A container ship left the Azores traveling north 0.5 hours before a cruise ship. The cruise ship traveled in the opposite direction going 14.5 km/h slower than the container ship for 5.8 hours after which time the vessels were 206.3 km apart. Find the container ship's speed.
- 7) John left Trevon's house and drove toward the lake at an average speed of 59.5 km/h. Jasmine left 0.7 hours later and drove in the opposite direction with an average speed of 57 km/h. How long does Jasmine need to drive before they are 472.7 km apart?
- 8) A cargo plane left Sydney flying south 7.5 hours before an Air Force plane. The Air Force plane flew in the opposite direction going 72.4 mph faster than the cargo plane for four hours after which time the planes were 2642.5 mi. apart. What was the cargo plane's speed?
- 9) A cruise ship and a container ship left Port 42 at the same time. The ships traveled in opposite directions. The container ship traveled 5.5 mph faster than the cruise ship. After 2.6 hours they were 102.7 mi. apart. Find the cruise ship's speed.
- 10) A diesel train left Washington and traveled toward Johannesburg at an average speed of 29.5 mph. A freight train left 3.3 hours later and traveled in the opposite direction with an average speed of 12.2 mph. How long does the freight train need to travel before the trains are 243.3 mi. apart?
- 11) An Air Force plane left Tokyo and flew toward the maintenance facility at an average speed of 299.6 mph. A jet left one hour later and flew in the same direction but with an average speed of 342.4 mph. Find the number of hours the Air Force plane flew before the jet caught up.
- 12) James left the mall and traveled toward the recycling plant at an average speed of 65 km/h. Ted left 0.3 hours later and traveled in the same direction but with an average speed of 80 km/h. How long did James travel before Ted caught up?



- 13) Adam left the airport and traveled toward the ferry office. 2.4 hours later Mei left traveling 42 km/h faster in an effort to catch up to him. After 1.8 hours Mei finally caught up. Find Adam's average speed.
- 14) Mei left Cody's house and drove east at an average speed of 60 km/h. Jack left 1.1 hours later and drove in the same direction but with an average speed of 76.5 km/h. Find the number of hours Mei drove before Jack caught up.
- 15) Jose left the hospital and drove west at an average speed of 60.4 km/h. Adam left 0.6 hours later and drove in the same direction but with an average speed of 75.5 km/h. Find the number of hours Jose drove before Adam caught up.
- 16) A container ship left the Azores and traveled toward Tahiti. An aircraft carrier left two hours later traveling 1.2 mph faster in an effort to catch up to it. After 11 hours the aircraft carrier finally caught up. What was the container ship's average speed?
- 17) Eugene left the mall and drove toward the dump. 2.6 hours later Mofor left driving 42.9 mph faster in an effort to catch up to him. After two hours Mofor finally caught up. Find Eugene's average speed.
- 18) Natalie drove to the lake and back. It took 3.5 hours longer to go there than it did to come back. The average speed on the trip there was 22.5 mph. The average speed on the way back was 75 mph. How many hours did the trip there take?
- 19) Amanda traveled to her friend's house and back. The trip there took 5.5 hours and the trip back took 5.7 hours. She averaged 0.8 mph faster on the trip there than on the return trip. Find Amanda's average speed on the outbound trip.
- 20) Nicole made a trip to the town hall and back. The trip there took four hours and the trip back took three hours. She averaged 9.8 km/h faster on the return trip than on the outbound trip. What was Nicole's average speed on the outbound trip?
- 21) Danielle drove to the train station and back. The trip there took one hour and the trip back took 0.6 hours. She averaged 23 km/h faster on the return trip than on the outbound trip. What was Danielle's average speed on the outbound trip?
- 22) An aircraft carrier traveled to Guam and back. It took 2.6 hours longer to go there than it did to come back. The average speed on the trip there was 9 mph. The average speed on the way back was 15 mph. How many hours did the trip there take?
- 23) A fishing boat left Hawaii and traveled toward Tahiti at an average speed of 21.6 km/h. A cruise ship left 0.4 hours later and traveled in the opposite direction with an average speed of 26 km/h. How long does the cruise ship need to travel before the vessels are 203.8 km apart?
- 24) A passenger train traveled to New York and back. The trip there took 19.6 hours and the trip back took seven hours. It averaged 48.6 mph faster on the return trip than on the outbound trip. Find the passenger train's average speed on the outbound trip.



Answers to Assignment (ID: 3)

1) 2.6 hours

5) 1.8 hours

9) 17 mph

13) 31.5 km/h

17) 33 mph

21) 34.5 km/h

2) 69.5 mph

6) 24 km/h

10) 3.5 hours

14) 5.1 hours

18) 5 hours

22) 6.5 hours

3) 19.6 mph

7) 3.7 hours

11) 8 hours

15) 3 hours

19) 22.8 mph

23) 4.1 hours

4) 7.4 mph

8) 151.8 mph

12) 1.6 hours

16) 6.6 mph

20) 29.4 km/h

24) 27 mph



Assignment

- 1) A jet made a trip to Moscow and back. The trip there took 8.5 hours and the trip back took 5.9 hours. It averaged 98.8 mph faster on the return trip than on the outbound trip. What was the jet's average speed on the outbound trip?
- 2) An aircraft carrier traveled to Madagascar and back. The trip there took 2.3 hours and the trip back took two hours. It averaged 1.2 km/h faster on the return trip than on the outbound trip. Find the aircraft carrier's average speed on the outbound trip.
- 3) Aliyah left the hospital and traveled toward her friend's house at an average speed of 56.6 mph. Totsakan left at the same time and traveled in the opposite direction with an average speed of 57 mph. How long does Totsakan need to travel before they are 397.6 mi. apart?
- 4) A passenger train left the station and traveled south at an average speed of 31.5 km/h. A freight train left at the same time and traveled in the opposite direction with an average speed of 41 km/h. How long does the freight train need to travel before the trains are 261 km apart?
- 5) A cattle train left Seoul traveling south 10.4 hours before a diesel train. The diesel train traveled in the opposite direction going 20.9 km/h faster than the cattle train for 0.6 hours after which time the trains were 732.9 km apart. What was the cattle train's speed?
- 6) A cruise ship left Hawaii and traveled east at an average speed of 9.5 km/h. A container ship left 2.8 hours later and traveled in the same direction but with an average speed of 13 km/h. How long did the cruise ship travel before the container ship caught up?
- 7) Huong left the hardware store and drove toward the capital at an average speed of 22.2 mph. Arjun left at the same time and drove in the opposite direction with an average speed of 25.7 mph. Find the number of hours Arjun needs to drive before they are 143.7 mi. apart.
- 8) Matt left the mall traveling toward the desert 4.3 hours before Molly. Molly traveled in the opposite direction going 17.2 mph slower than Matt for 1.7 hours after which time they were 495.9 mi. apart. Find Matt's speed.
- 9) Bill left the science museum and traveled toward the lake. 2.5 hours later Shanice left traveling 37.5 mph faster in an effort to catch up to him. After 2.4 hours Shanice finally caught up. Find Bill's average speed.
- 10) Jennifer left the hospital and drove west. Imani left 3.3 hours later driving 47.4 mph faster in an effort to catch up to her. After 2.2 hours Imani finally caught up. What was Jennifer's average speed?
- 11) A cargo plane left Nairobi and flew east at an average speed of 191.5 km/h. A passenger plane left 2.7 hours later and flew in the same direction but with an average speed of 306.4 km/h. How long did the cargo plane fly before the passenger plane caught up?
- 12) A cattle train left Abuja and traveled toward the fueling station. 5.4 hours later a passenger train left traveling 10.8 km/h faster in an effort to catch up to it. After 5.6 hours the passenger train finally caught up. What was the cattle train's average speed?



- 13) An aircraft carrier made a trip to a navigational buoy and back. The trip there took 1.2 hours and the trip back took 4.5 hours. It averaged 18.7 km/h faster on the trip there than on the return trip. Find the aircraft carrier's average speed on the outbound trip.
- 14) Perry drove to the ferry office and back. It took 3.4 hours less time to get there than it did to get back. The average speed on the trip there was 70 mph. The average speed on the way back was 27.5 mph. How many hours did the trip there take?
- 15) Jack traveled to the recycling plant and back. It took 0.2 hours less time to get there than it did to get back. The average speed on the trip there was 37.4 mph. The average speed on the way back was 34 mph. How many hours did the trip there take?
- 16) Ted left school and drove toward the ocean. Scott left 0.5 hours later driving 5.1 mph faster in an effort to catch up to him. After two hours Scott finally caught up. Find Ted's average speed.
- 17) A cargo plane made a trip to the airshow and back. The trip there took 7.5 hours and the trip back took seven hours. It averaged 12.4 mph faster on the return trip than on the outbound trip. What was the cargo plane's average speed on the outbound trip?
- 18) A diesel train traveled to New York and back. It took 7.5 hours longer to go there than it did to come back. The average speed on the trip there was 22.1 km/h. The average speed on the way back was 47.6 km/h. How many hours did the trip there take?
- 19) A freight train traveled to the fueling station and back. It took 3.9 hours less time to get there than it did to get back. The average speed on the trip there was 71 km/h. The average speed on the way back was 49.7 km/h. How many hours did the trip there take?
- 20) Jasmine left school and drove toward the mountains at an average speed of 64 km/h. Natalie left at the same time and drove in the opposite direction with an average speed of 72 km/h. How long does Natalie need to drive before they are 340 km apart?
- 21) Ashley left the movie theater driving toward the ocean 0.5 hours before Emily. Emily drove in the opposite direction going 18.3 km/h slower than Ashley for 1.5 hours after which time they were 153.5 km apart. Find Ashley's speed.
- 22) Chelsea left the White House and traveled toward the town hall at an average speed of 30.2 mph. Jacob left at the same time and traveled in the opposite direction with an average speed of 52 mph. Find the number of hours Jacob needs to travel before they are 287.7 mi. apart.
- 23) Daniel left the airport and drove toward the dump at an average speed of 61.3 mph. Julia left 1.6 hours later and drove in the opposite direction with an average speed of 31 mph. Find the number of hours Julia needs to drive before they are 227.3 mi. apart.
- 24) An Air Force plane left Tokyo flying west 1.4 hours before a cargo plane. The cargo plane flew in the opposite direction going 221.5 mph faster than the Air Force plane for 10.4 hours after which time the planes were 7820.3 mi. apart. What was the Air Force plane's speed?



Answers to Assignment (ID: 4)

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|---------------|---------------|---------------|---------------|
| 1) 224.2 mph | 2) 8 km/h | 3) 3.5 hours | 4) 3.6 hours |
| 5) 62.1 km/h | 6) 10.4 hours | 7) 3 hours | 8) 68.2 mph |
| 9) 36 mph | 10) 31.6 mph | 11) 7.2 hours | 12) 11.2 km/h |
| 13) 25.5 km/h | 14) 2.2 hours | 15) 2 hours | 16) 20.4 mph |
| 17) 173.6 mph | 18) 14 hours | 19) 9.1 hours | 20) 2.5 hours |
| 21) 51.7 km/h | 22) 3.5 hours | 23) 1.4 hours | 24) 248.5 mph |



Assignment

- 1) A submarine and an aircraft carrier left Port 58 at the same time. The vessels traveled in opposite directions. The aircraft carrier traveled 12.2 mph faster than the submarine. After 3.5 hours they were 167.3 mi. apart. Find the submarine's speed.
- 2) Trevon left the airport and drove toward the train station at an average speed of 28.1 km/h. Ted left at the same time and drove in the opposite direction with an average speed of 46.9 km/h. How long does Ted need to drive before they are 225 km apart?
- 3) Micaela left the hardware store driving toward the lake one hour before Jenny. Jenny drove in the opposite direction going 24 km/h slower than Micaela for 2.6 hours after which time they were 309.6 km apart. What was Micaela's speed?
- 4) Shanice left the science museum and traveled toward the desert. 1.2 hours later James left traveling 27 km/h faster in an effort to catch up to her. After 1.4 hours James finally caught up. What was Shanice's average speed?
- 5) Kathryn left Julia's house and traveled east. Jill left 0.4 hours later traveling 10.4 km/h faster in an effort to catch up to her. After 2.6 hours Jill finally caught up. Find Kathryn's average speed.
- 6) An aircraft carrier traveled to Tahiti and back. It took 3.3 hours less time to get there than it did to get back. The average speed on the trip there was 20.4 mph. The average speed on the way back was 10.5 mph. How many hours did the trip there take?
- 7) A passenger plane left Los Angeles and flew east at an average speed of 172 mph. A jet left 1.3 hours later and flew in the same direction but with an average speed of 283.8 mph. Find the number of hours the passenger plane flew before the jet caught up.
- 8) A cruise ship left the Dania Pier and traveled east at an average speed of 9 mph. A submarine left 1.4 hours later and traveled in the same direction but with an average speed of 11.8 mph. Find the number of hours the cruise ship traveled before the submarine caught up.
- 9) A cattle train left Miami and traveled south. 4.9 hours later a diesel train left traveling 14.7 km/h faster in an effort to catch up to it. After 9.5 hours the diesel train finally caught up. Find the cattle train's average speed.
- 10) Heather left the airport and drove east at an average speed of 25.5 km/h. Shayna left 2.3 hours later and drove in the same direction but with an average speed of 60 km/h. How long did Heather drive before Shayna caught up?
- 11) Wilbur traveled to his cabin on the lake and back. It took 1.8 hours less time to get there than it did to get back. The average speed on the trip there was 57.2 km/h. The average speed on the way back was 26 km/h. How many hours did the trip there take?
- 12) A diesel train traveled to New York and back. It took 3.6 hours longer to go there than it did to come back. The average speed on the trip there was 28.6 km/h. The average speed on the way back was 39 km/h. How many hours did the trip there take?



- 13) A passenger plane made a trip to the maintenance facility and back. The trip there took 4.5 hours and the trip back took six hours. It averaged 67.5 mph faster on the trip there than on the return trip. What was the passenger plane's average speed on the outbound trip?
- 14) A submarine traveled to a navigational buoy and back. The trip there took 2.1 hours and the trip back took 1.5 hours. It averaged 6 mph faster on the return trip than on the outbound trip. Find the submarine's average speed on the outbound trip.
- 15) Mofor left home and drove toward his cabin on the lake at an average speed of 28 mph. Heather left 0.1 hours later and drove in the opposite direction with an average speed of 24.5 mph. How long does Heather need to drive before they are 44.8 mi. apart?
- 16) Shawna left the movie theater driving toward the mountains 0.5 hours before Huong. Huong drove in the opposite direction going 9.2 mph slower than Shawna for 0.5 hours after which time they were 96.5 mi. apart. How fast did Shawna drive?
- 17) Jill traveled to the town hall and back. The trip there took five hours and the trip back took 5.1 hours. She averaged 0.8 km/h faster on the trip there than on the return trip. Find Jill's average speed on the outbound trip.
- 18) Mark made a trip to the train station and back. The trip there took 5.9 hours and the trip back took five hours. He averaged 8.1 km/h faster on the return trip than on the outbound trip. Find Mark's average speed on the outbound trip.
- 19) A jet and a passenger plane left London at the same time. The planes flew in opposite directions. The passenger plane flew 53.5 mph faster than the jet. After four hours they were 3749.2 mi. apart. Find the jet's speed.
- 20) A jet left Paris and flew south at an average speed of 182.1 km/h. An Air Force plane left at the same time and flew in the opposite direction with an average speed of 344 km/h. Find the number of hours the Air Force plane needs to fly before the planes are 4208.8 km apart.
- 21) Jessica and Stefan left the hospital at the same time. They traveled in opposite directions. Stefan traveled 15.3 mph faster than Jessica. After one hour they were 113.1 mi. apart. Find Jessica's speed.
- 22) Jacob left home and traveled toward the ocean at an average speed of 70 mph. Kathryn left 0.3 hours later and traveled in the same direction but with an average speed of 80 mph. Find the number of hours Jacob traveled before Kathryn caught up.
- 23) Gabriella left the mall and drove toward her friend's house at an average speed of 20 mph. Molly left 1.3 hours later and drove in the same direction but with an average speed of 30.4 mph. Find the number of hours Gabriella drove before Molly caught up.
- 24) Kayla left Pranav's house and traveled toward the town hall at an average speed of 30.4 km/h. Darryl left 0.7 hours later and traveled in the same direction but with an average speed of 36 km/h. How long did Kayla travel before Darryl caught up?



Answers to Assignment (ID: 5)

- | | | | |
|---------------|---------------|---------------|----------------|
| 1) 17.8 mph | 2) 3 hours | 3) 60 km/h | 4) 31.5 km/h |
| 5) 67.6 km/h | 6) 3.5 hours | 7) 3.3 hours | 8) 5.9 hours |
| 9) 28.5 km/h | 10) 4 hours | 11) 1.5 hours | 12) 13.5 hours |
| 13) 270 mph | 14) 15 mph | 15) 0.8 hours | 16) 67.4 mph |
| 17) 40.8 km/h | 18) 45 km/h | 19) 441.9 mph | 20) 8 hours |
| 21) 48.9 mph | 22) 2.4 hours | 23) 3.8 hours | 24) 4.5 hours |



Assignment

- 1) A cargo plane left London and flew north. A passenger plane left 1.1 hours later flying 107.8 km/h faster in an effort to catch up to it. After 2.9 hours the passenger plane finally caught up. Find the cargo plane's average speed.
- 2) A cattle train left Washington and traveled toward the outer-most station at an average speed of 16 km/h. A passenger train left 4.2 hours later and traveled in the same direction but with an average speed of 25.6 km/h. Find the number of hours the cattle train traveled before the passenger train caught up.
- 3) A cattle train and a passenger train left the station at the same time. The trains traveled in opposite directions. The passenger train traveled 20.6 km/h faster than the cattle train. After 15 hours they were 1107 km apart. Find the cattle train's speed.
- 4) A diesel train left Abuja and traveled toward the repair yards. A freight train left 4.8 hours later traveling 3.2 mph faster in an effort to catch up to it. After 15 hours the freight train finally caught up. What was the diesel train's average speed?
- 5) DeShawn left the White House and drove toward the train station. 3.2 hours later Alberto left driving 36.8 mph faster in an effort to catch up to him. After 1.8 hours Alberto finally caught up. Find DeShawn's average speed.
- 6) Imani drove to her cabin on the lake and back. The trip there took three hours and the trip back took five hours. She averaged 16.2 mph faster on the trip there than on the return trip. Find Imani's average speed on the outbound trip.
- 7) Molly traveled to the ferry office and back. It took one hour less time to get there than it did to get back. The average speed on the trip there was 52.5 mph. The average speed on the way back was 42 mph. How many hours did the trip there take?
- 8) An aircraft carrier traveled to Guam and back. It took 4.2 hours less time to get there than it did to get back. The average speed on the trip there was 15.4 km/h. The average speed on the way back was 10.5 km/h. How many hours did the trip there take?
- 9) A cargo plane flew to the airshow and back. The trip there took 2.4 hours and the trip back took 3.6 hours. It averaged 159 km/h faster on the trip there than on the return trip. What was the cargo plane's average speed on the outbound trip?
- 10) Jaidee traveled to her cabin on the lake and back. The trip there took 3.5 hours and the trip back took 2.8 hours. She averaged 10.6 km/h faster on the return trip than on the outbound trip. Find Jaidee's average speed on the outbound trip.



- 11) Sarawong drove to the town hall and back. It took 1.5 hours less time to get there than it did to get back. The average speed on the trip there was 44 km/h. The average speed on the way back was 30.8 km/h. How many hours did the trip there take?
- 12) Mike drove to the train station and back. It took one hour longer to go there than it did to come back. The average speed on the trip there was 24 mph. The average speed on the way back was 39 mph. How many hours did the trip there take?
- 13) Jimmy and Jessica left the airport at the same time. They traveled in opposite directions. Jessica traveled 5.1 mph faster than Jimmy. After six hours they were 844.2 mi. apart. Find Jimmy's speed.
- 14) John left the mall and traveled north at an average speed of 59 mph. Julia left 4.3 hours later and traveled in the opposite direction with an average speed of 60 mph. How long does Julia need to travel before they are 372.7 mi. apart?
- 15) A cargo plane left Sydney and flew south at an average speed of 380.5 km/h. A passenger plane left 7.4 hours later and flew in the opposite direction with an average speed of 415.2 km/h. Find the number of hours the passenger plane needs to fly before the planes are 5998.5 km apart.
- 16) An Air Force plane left the airport and flew toward Dublin at an average speed of 409.9 km/h. A cargo plane left 4.5 hours later and flew in the opposite direction with an average speed of 303 km/h. How long does the cargo plane need to fly before the planes are 5765.5 km apart?
- 17) A freight train left Seoul and traveled toward the repair yards. 4.7 hours later a diesel train left traveling 32.9 km/h faster in an effort to catch up to it. After three hours the diesel train finally caught up. Find the freight train's average speed.
- 18) Brenda and James left the mall at the same time. They drove in opposite directions. James drove 13.4 km/h faster than Brenda. After one hour they were 67 km apart. Find Brenda's speed.
- 19) Adam left Maria's house and drove north at an average speed of 69.2 mph. Jill left 3.9 hours later and drove in the opposite direction with an average speed of 27 mph. Find the number of hours Jill needs to drive before they are 375.7 mi. apart.
- 20) A submarine left Port 50 and traveled east. A cruise ship left 2.4 hours later traveling 6 mph faster in an effort to catch up to it. After 8.8 hours the cruise ship finally caught up. Find the submarine's average speed.
- 21) A cattle train left the station and traveled north. 4.8 hours later a diesel train left traveling 10.8 mph faster in an effort to catch up to it. After 5.2 hours the diesel train finally caught up. Find the cattle train's average speed.
- 22) A passenger train left Seoul and traveled toward the repair yards. 10.4 hours later a cattle train left traveling 70.2 mph faster in an effort to catch up to it. After 1.6 hours the cattle train finally caught up. Find the passenger train's average speed.



23) An aircraft carrier left the Dania Pier and traveled toward St. Vincent. Six hours later a container ship left traveling 9.3 km/h faster in an effort to catch up to it. After eight hours the container ship finally caught up. Find the aircraft carrier's average speed.

24) Eugene traveled to the lake and back. It took 0.5 hours less time to get there than it did to get back. The average speed on the trip there was 71.1 km/h. The average speed on the way back was 47.4 km/h. How many hours did the trip there take?



Answers to Assignment (ID: 6)

- 1) 284.2 km/h
- 5) 20.7 mph
- 9) 477 km/h
- 13) 67.8 mph
- 17) 21 km/h
- 21) 11.7 mph

- 2) 11.2 hours
- 6) 40.5 mph
- 10) 42.4 km/h
- 14) 1 hour
- 18) 26.8 km/h
- 22) 10.8 mph

- 3) 26.6 km/h
- 7) 4 hours
- 11) 3.5 hours
- 15) 4 hours
- 19) 1.1 hours
- 23) 12.4 km/h

- 4) 10 mph
- 8) 9 hours
- 12) 2.6 hours
- 16) 5.5 hours
- 20) 22 mph
- 24) 1 hour



Assignment

- 1) Natalie made a trip to her cabin on the lake and back. The trip there took 2.1 hours and the trip back took 5.6 hours. She averaged 35 km/h faster on the trip there than on the return trip. What was Natalie's average speed on the outbound trip?
- 2) Amanda left school and traveled toward the lake. 0.7 hours later Jennifer left traveling 5.6 km/h faster in an effort to catch up to her. After 2.8 hours Jennifer finally caught up. Find Amanda's average speed.
- 3) Nicole left the hospital and traveled toward the train station at an average speed of 27 mph. Mary left 2.8 hours later and traveled in the same direction but with an average speed of 58.5 mph. Find the number of hours Nicole traveled before Mary caught up.
- 4) A freight train traveled to the outer-most station and back. It took 1.8 hours longer to go there than it did to come back. The average speed on the trip there was 12.5 mph. The average speed on the way back was 14 mph. How many hours did the trip there take?
- 5) Alberto drove to the ferry office and back. It took 1.1 hours less time to get there than it did to get back. The average speed on the trip there was 58 mph. The average speed on the way back was 46.4 mph. How many hours did the trip there take?
- 6) Castel traveled to the recycling plant and back. The trip there took five hours and the trip back took 3.4 hours. He averaged 20.8 km/h faster on the return trip than on the outbound trip. Find Castel's average speed on the outbound trip.
- 7) Cody traveled to the train station and back. It took four hours less time to get there than it did to get back. The average speed on the trip there was 72.5 km/h. The average speed on the way back was 22.5 km/h. How many hours did the trip there take?
- 8) Willie left the hardware store and drove toward his cabin on the lake at an average speed of 76.6 km/h. Sumalee left 4.8 hours later and drove in the opposite direction with an average speed of 33 km/h. Find the number of hours Sumalee needs to drive before they are 444.4 km apart.
- 9) Aliyah left the mall driving north 1.2 hours before Pranav. Pranav drove in the opposite direction going 33.5 km/h faster than Aliyah for 1.2 hours after which time they were 119.4 km apart. What was Aliyah's speed?
- 10) An aircraft carrier traveled to Guam and back. The trip there took 0.5 hours and the trip back took 0.8 hours. It averaged 8.1 mph faster on the trip there than on the return trip. What was the aircraft carrier's average speed on the outbound trip?
- 11) An Air Force plane left Singapore flying north 1.4 hours before a jet. The jet flew in the opposite direction going 84.4 mph faster than the Air Force plane for nine hours after which time the planes were 3824.8 mi. apart. What was the Air Force plane's speed?
- 12) A diesel train left the station and traveled west at an average speed of 64 mph. A cattle train left 2.7 hours later and traveled in the opposite direction with an average speed of 44.5 mph. How long does the cattle train need to travel before the trains are 1149.3 mi. apart?



- 13) Norachai left school traveling toward the dump 3.4 hours before Aliyah. Aliyah traveled in the opposite direction going 18 mph slower than Norachai for 0.5 hours after which time they were 316.6 mi. apart. Find Norachai's speed.
- 14) Huong and Shanice left the science museum at the same time. They drove in opposite directions. Shanice drove 40.7 km/h faster than Huong. After three hours they were 293.1 km apart. Find Huong's speed.
- 15) A passenger plane left London and flew toward the maintenance facility at an average speed of 319 km/h. A jet left 1.4 hours later and flew in the same direction but with an average speed of 420.5 km/h. How long did the passenger plane fly before the jet caught up?
- 16) A cruise ship left the Dania Pier and traveled south. Three hours later a container ship left traveling 4 km/h faster in an effort to catch up to it. After 10.5 hours the container ship finally caught up. What was the cruise ship's average speed?
- 17) A diesel train left Miami and traveled west at an average speed of 14 km/h. A cattle train left 8.5 hours later and traveled in the same direction but with an average speed of 56.5 km/h. How long did the diesel train travel before the cattle train caught up?
- 18) A cargo plane left Nairobi and flew east. 2.7 hours later an Air Force plane left flying 136.8 mph faster in an effort to catch up to it. After three hours the Air Force plane finally caught up. What was the cargo plane's average speed?
- 19) Beth left the White House and drove toward her cabin on the lake at an average speed of 49 mph. Alberto left 0.2 hours later and drove in the same direction but with an average speed of 51 mph. How long did Beth drive before Alberto caught up?
- 20) Perry left school and drove toward the lake at an average speed of 39.2 mph. Danielle left 0.6 hours later and drove in the same direction but with an average speed of 44 mph. Find the number of hours Perry drove before Danielle caught up.
- 21) Kristin left the airport and traveled west at an average speed of 30.2 mph. Dan left two hours later and traveled in the same direction but with an average speed of 45.3 mph. Find the number of hours Kristin traveled before Dan caught up.
- 22) Jack made a trip to the lake and back. The trip there took 3.3 hours and the trip back took two hours. He averaged 26 km/h faster on the return trip than on the outbound trip. What was Jack's average speed on the outbound trip?
- 23) A passenger train traveled to Las Vegas and back. It took 3.9 hours less time to get there than it did to get back. The average speed on the trip there was 84 km/h. The average speed on the way back was 58 km/h. How many hours did the trip there take?
- 24) A container ship traveled to a navigational buoy and back. It took 3.9 hours less time to get there than it did to get back. The average speed on the trip there was 14.8 km/h. The average speed on the way back was 7 km/h. How many hours did the trip there take?



Answers to Assignment (ID: 7)

- | | | | |
|----------------|---------------|---------------|---------------|
| 1) 56 km/h | 2) 22.4 km/h | 3) 5.2 hours | 4) 16.8 hours |
| 5) 4.4 hours | 6) 44.2 km/h | 7) 1.8 hours | 8) 0.7 hours |
| 9) 22 km/h | 10) 21.6 mph | 11) 158 mph | 12) 9 hours |
| 13) 74 mph | 14) 28.5 km/h | 15) 5.8 hours | 16) 14 km/h |
| 17) 11.3 hours | 18) 152 mph | 19) 5.1 hours | 20) 5.5 hours |
| 21) 6 hours | 22) 40 km/h | 23) 8.7 hours | 24) 3.5 hours |



Assignment

- 1) An Air Force plane made a trip to the airshow and back. The trip there took eight hours and the trip back took 8.8 hours. It averaged 35 mph faster on the trip there than on the return trip. Find the Air Force plane's average speed on the outbound trip.
- 2) Lea left the movie theater traveling toward the lake 0.8 hours before Emily. Emily traveled in the opposite direction going 43.7 mph faster than Lea for one hour after which time they were 108.1 mi. apart. What was Lea's speed?
- 3) Ashley drove to the ferry office and back. It took 0.3 hours longer to go there than it did to come back. The average speed on the trip there was 45.5 mph. The average speed on the way back was 52 mph. How many hours did the trip there take?
- 4) Emily traveled to her friend's house and back. The trip there took 4.5 hours and the trip back took 3.2 hours. She averaged 20.8 mph faster on the return trip than on the outbound trip. What was Emily's average speed on the outbound trip?
- 5) A cattle train traveled to the repair yards and back. The trip there took 18 hours and the trip back took 12 hours. It averaged 9.6 km/h faster on the return trip than on the outbound trip. What was the cattle train's average speed on the outbound trip?
- 6) A diesel train and a freight train left Abuja at the same time. The trains traveled in opposite directions. The freight train traveled 1.1 km/h faster than the diesel train. After 16 hours they were 1364.8 km apart. Find the diesel train's speed.
- 7) A container ship left Port 24 and traveled toward St. Vincent at an average speed of 8.9 km/h. A cruise ship left at the same time and traveled in the opposite direction with an average speed of 20.1 km/h. Find the number of hours the cruise ship needs to travel before the vessels are 319 km apart.
- 8) Carlos left home and traveled toward the recycling plant at an average speed of 30 km/h. Mark left at the same time and traveled in the opposite direction with an average speed of 72 km/h. Find the number of hours Mark needs to travel before they are 295.8 km apart.
- 9) Micaela left the science museum and traveled toward the train station at an average speed of 28 mph. Jack left 0.1 hours later and traveled in the same direction but with an average speed of 28.5 mph. How long did Micaela travel before Jack caught up?
- 10) Trevon left Rob's house and drove toward his cabin on the lake. 2.1 hours later Perry left driving 51.8 mph faster in an effort to catch up to him. After 0.9 hours Perry finally caught up. Find Trevon's average speed.
- 11) Shanice left the airport and drove toward the ferry office at an average speed of 21.4 mph. Brenda left two hours later and drove in the opposite direction with an average speed of 20.9 mph. How long does Brenda need to drive before they are 127.4 mi. apart?
- 12) Kathryn left home and traveled toward the ocean at an average speed of 65.3 mph. Kristin left three hours later and traveled in the opposite direction with an average speed of 73.4 mph. How long does Kristin need to travel before they are 612 mi. apart?



- 13) A diesel train left the station and traveled west at an average speed of 12.6 km/h. A cattle train left six hours later and traveled in the same direction but with an average speed of 18.2 km/h. Find the number of hours the diesel train traveled before the cattle train caught up.
- 14) Anjali left Jaidee's house and drove toward her friend's house. Shayna left 0.7 hours later driving 28.7 km/h faster in an effort to catch up to her. After 0.5 hours Shayna finally caught up. What was Anjali's average speed?
- 15) Sumalee left the airport and traveled west. Krystal left 1.1 hours later traveling 12 km/h faster in an effort to catch up to her. After 3.3 hours Krystal finally caught up. What was Sumalee's average speed?
- 16) Totsakan left the mall and traveled toward the recycling plant at an average speed of 31.5 mph. Lisa left 0.6 hours later and traveled in the same direction but with an average speed of 36 mph. Find the number of hours Totsakan traveled before Lisa caught up.
- 17) Heather left the White House and drove west at an average speed of 44 km/h. Shawna left at the same time and drove in the opposite direction with an average speed of 80 km/h. Find the number of hours Shawna needs to drive before they are 198.4 km apart.
- 18) An Air Force plane flew to Dublin and back. The trip there took 4.8 hours and the trip back took six hours. It averaged 65 mph faster on the trip there than on the return trip. What was the Air Force plane's average speed on the outbound trip?
- 19) An aircraft carrier made a trip to Madagascar and back. The trip there took 2.2 hours and the trip back took one hour. It averaged 7.2 mph faster on the return trip than on the outbound trip. Find the aircraft carrier's average speed on the outbound trip.
- 20) An Air Force plane left the airport and flew toward Moscow at an average speed of 184.8 km/h. A jet left 0.3 hours later and flew in the same direction but with an average speed of 192 km/h. Find the number of hours the Air Force plane flew before the jet caught up.
- 21) An aircraft carrier traveled to dry dock and back. It took 0.5 hours less time to get there than it did to get back. The average speed on the trip there was 26.5 km/h. The average speed on the way back was 21.2 km/h. How many hours did the trip there take?
- 22) Mofor made a trip to the ferry office and back. The trip there took two hours and the trip back took three hours. He averaged 24.2 km/h faster on the trip there than on the return trip. What was Mofor's average speed on the outbound trip?
- 23) Shawna drove to the recycling plant and back. It took 0.6 hours longer to go there than it did to come back. The average speed on the trip there was 25 km/h. The average speed on the way back was 32.5 km/h. How many hours did the trip there take?
- 24) An Air Force plane left Sydney and flew toward Las Vegas at an average speed of 167.1 mph. A jet left one hour later and flew in the opposite direction with an average speed of 230.1 mph. Find the number of hours the jet needs to fly before the planes are 1358.7 mi. apart.



Answers to Assignment (ID: 8)

- | | | | |
|----------------|---------------|---------------|---------------|
| 1) 385 mph | 2) 23 mph | 3) 2.4 hours | 4) 51.2 mph |
| 5) 19.2 km/h | 6) 42.1 km/h | 7) 11 hours | 8) 2.9 hours |
| 9) 5.7 hours | 10) 22.2 mph | 11) 2 hours | 12) 3 hours |
| 13) 19.5 hours | 14) 20.5 km/h | 15) 36 km/h | 16) 4.8 hours |
| 17) 1.6 hours | 18) 325 mph | 19) 6 mph | 20) 8 hours |
| 21) 2 hours | 22) 72.6 km/h | 23) 2.6 hours | 24) 3 hours |



Assignment

- 1) A container ship left Port 35 and traveled west at an average speed of 5.3 mph. An aircraft carrier left at the same time and traveled in the opposite direction with an average speed of 15.2 mph. Find the number of hours the aircraft carrier needs to travel before the vessels are 205 mi. apart.
- 2) Joe left home driving toward the dump one hour before Kathryn. Kathryn drove in the opposite direction going 29.6 mph slower than Joe for five hours after which time they were 697.9 mi. apart. How fast did Joe drive?
- 3) Jessica left school and drove north at an average speed of 69.7 km/h. Imani left five hours later and drove in the opposite direction with an average speed of 77.2 km/h. How long does Imani need to drive before they are 495.4 km apart?
- 4) A cruise ship left Hawaii traveling east 7.6 hours before a fishing boat. The fishing boat traveled in the opposite direction going 1.1 mph faster than the cruise ship for 3.4 hours after which time the ships were 340.7 mi. apart. How fast did the cruise ship travel?
- 5) Jacob left Daniel's house and traveled south at an average speed of 52.4 km/h. Willie left at the same time and traveled in the opposite direction with an average speed of 55.9 km/h. Find the number of hours Willie needs to travel before they are 541.5 km apart.
- 6) Gabriella left the White House traveling toward the mountains 5.3 hours before Trevon. Trevon traveled in the opposite direction going 21.6 km/h slower than Gabriella for 0.5 hours after which time they were 373.5 km apart. Find Gabriella's speed.
- 7) Kayla and Elisa left home at the same time. They traveled in opposite directions. Elisa traveled 17.1 mph faster than Kayla. After five hours they were 626.5 mi. apart. Find Kayla's speed.
- 8) A freight train left Miami and traveled south at an average speed of 15 mph. A passenger train left 5.2 hours later and traveled in the same direction but with an average speed of 22.5 mph. Find the number of hours the freight train traveled before the passenger train caught up.
- 9) A fishing boat left Diego Garcia and traveled toward dry dock at an average speed of 12.2 mph. A cruise ship left 5.9 hours later and traveled in the same direction but with an average speed of 24 mph. Find the number of hours the fishing boat traveled before the cruise ship caught up.
- 10) Eduardo left the White House and drove toward the town hall. Dan left two hours later driving 24.8 mph faster in an effort to catch up to him. After three hours Dan finally caught up. Find Eduardo's average speed.



- 11) Elisa made a trip to the train station and back. The trip there took four hours and the trip back took 2.4 hours. She averaged 20.2 km/h faster on the return trip than on the outbound trip. What was Elisa's average speed on the outbound trip?
- 12) DeShawn left school and traveled toward the capital at an average speed of 42.4 km/h. Stephanie left 1.5 hours later and traveled in the same direction but with an average speed of 58.3 km/h. How long did DeShawn travel before Stephanie caught up?
- 13) A passenger plane left Paris and flew toward Istanbul at an average speed of 201 km/h. A cargo plane left 0.8 hours later and flew in the same direction but with an average speed of 234.5 km/h. Find the number of hours the passenger plane flew before the cargo plane caught up.
- 14) A jet left London and flew west. 0.3 hours later an Air Force plane left flying 26.7 km/h faster in an effort to catch up to it. After 2.5 hours the Air Force plane finally caught up. Find the jet's average speed.
- 15) A cruise ship traveled to St. Vincent and back. It took 0.9 hours longer to go there than it did to come back. The average speed on the trip there was 11.2 mph. The average speed on the way back was 12 mph. How many hours did the trip there take?
- 16) An aircraft carrier traveled to Madagascar and back. It took 0.1 hours longer to go there than it did to come back. The average speed on the trip there was 17.5 mph. The average speed on the way back was 21 mph. How many hours did the trip there take?
- 17) Jaidee drove to the ferry office and back. It took 0.5 hours less time to get there than it did to get back. The average speed on the trip there was 71.1 mph. The average speed on the way back was 47.4 mph. How many hours did the trip there take?
- 18) Sarawong traveled to the recycling plant and back. The trip there took six hours and the trip back took 4.4 hours. He averaged 12 mph faster on the return trip than on the outbound trip. What was Sarawong's average speed on the outbound trip?
- 19) Mike left school driving east one hour before Jose. Jose drove in the opposite direction going 7 km/h faster than Mike for five hours after which time they were 535.5 km apart. How fast did Mike drive?
- 20) A cargo plane left Singapore and flew east at an average speed of 251.9 km/h. An Air Force plane left at the same time and flew in the opposite direction with an average speed of 379.1 km/h. How long does the Air Force plane need to fly before the planes are 2524 km apart?
- 21) A passenger train made a trip to New York and back. The trip there took five hours and the trip back took 16.4 hours. It averaged 28.5 km/h faster on the trip there than on the return trip. What was the passenger train's average speed on the outbound trip?
- 22) Rob made a trip to the recycling plant and back. The trip there took five hours and the trip back took 3.7 hours. He averaged 13 mph faster on the return trip than on the outbound trip. Find Rob's average speed on the outbound trip.



23) Shayna and Jack left school at the same time. They drove in opposite directions. Jack drove 10.8 mph faster than Shayna. After one hour they were 114.6 mi. apart. Find Shayna's speed.

24) Ndiba left the science museum traveling south 0.9 hours before Adam. Adam traveled in the opposite direction going 0.9 mph slower than Ndiba for 4.6 hours after which time they were 232.2 mi. apart. How fast did Ndiba travel?



Answers to Assignment (ID: 9)

- | | | | |
|---------------|----------------|----------------|---------------|
| 1) 10 hours | 2) 76.9 mph | 3) 1 hour | 4) 23.4 mph |
| 5) 5 hours | 6) 61 km/h | 7) 54.1 mph | 8) 15.6 hours |
| 9) 12 hours | 10) 37.2 mph | 11) 30.3 km/h | 12) 5.5 hours |
| 13) 5.6 hours | 14) 222.5 km/h | 15) 13.5 hours | 16) 0.6 hours |
| 17) 1 hour | 18) 33 mph | 19) 45.5 km/h | 20) 4 hours |
| 21) 41 km/h | 22) 37 mph | 23) 51.9 mph | 24) 23.4 mph |



Assignment

- 1) Brenda left the movie theater and traveled toward the desert at an average speed of 64.5 mph. Emily left one hour later and traveled in the same direction but with an average speed of 77.4 mph. How long did Brenda travel before Emily caught up?
- 2) Adam left the airport and drove toward the ocean. Mofor left 1.5 hours later driving 15.9 km/h faster in an effort to catch up to him. After four hours Mofor finally caught up. Find Adam's average speed.
- 3) A passenger plane left Sydney and flew toward the airshow. A cargo plane left three hours later flying 195.2 km/h faster in an effort to catch up to it. After 4.5 hours the cargo plane finally caught up. Find the passenger plane's average speed.
- 4) An aircraft carrier left the Azores and traveled east at an average speed of 10.8 km/h. A container ship left 3.4 hours later and traveled in the same direction but with an average speed of 18 km/h. How long did the aircraft carrier travel before the container ship caught up?
- 5) An Air Force plane left Rome and flew south at an average speed of 393.1 km/h. A jet left three hours later and flew in the opposite direction with an average speed of 388.3 km/h. How long does the jet need to fly before the planes are 5867.7 km apart?
- 6) Julia left the airport and drove toward the lake at an average speed of 58.8 mph. Rob left 1.3 hours later and drove in the same direction but with an average speed of 77 mph. Find the number of hours Julia drove before Rob caught up.
- 7) Eugene left the science museum and traveled toward the ocean. Lisa left 1.3 hours later traveling 19.5 mph faster in an effort to catch up to him. After 3.6 hours Lisa finally caught up. Find Eugene's average speed.
- 8) A diesel train left Bangalore and traveled toward New York at an average speed of 32 mph. A freight train left 2.7 hours later and traveled in the same direction but with an average speed of 42.8 mph. Find the number of hours the diesel train traveled before the freight train caught up.
- 9) A jet left the airport and flew west at an average speed of 199.6 mph. A passenger plane left 3.9 hours later and flew in the same direction but with an average speed of 499 mph. Find the number of hours the jet flew before the passenger plane caught up.
- 10) A cruise ship made a trip to Madagascar and back. The trip there took 1.3 hours and the trip back took 2.5 hours. It averaged 4.8 km/h faster on the trip there than on the return trip. Find the cruise ship's average speed on the outbound trip.
- 11) A cattle train traveled to the repair yards and back. The trip there took 15.5 hours and the trip back took 18 hours. It averaged 12.5 km/h faster on the trip there than on the return trip. Find the cattle train's average speed on the outbound trip.
- 12) Alberto made a trip to the town hall and back. The trip there took two hours and the trip back took 2.6 hours. He averaged 13.2 km/h faster on the trip there than on the return trip. What was Alberto's average speed on the outbound trip?



- 13) Castel drove to the train station and back. It took 1.2 hours longer to go there than it did to come back. The average speed on the trip there was 39.5 km/h. The average speed on the way back was 55.3 km/h. How many hours did the trip there take?
- 14) Cody traveled to the lake and back. The trip there took three hours and the trip back took five hours. He averaged 23 mph faster on the trip there than on the return trip. Find Cody's average speed on the outbound trip.
- 15) Willie left the science museum and drove toward his friend's house at an average speed of 58.5 km/h. Ashley left 0.5 hours later and drove in the same direction but with an average speed of 70.2 km/h. Find the number of hours Willie drove before Ashley caught up.
- 16) A cattle train traveled to Johannesburg and back. It took 2.3 hours less time to get there than it did to get back. The average speed on the trip there was 25 mph. The average speed on the way back was 20 mph. How many hours did the trip there take?
- 17) Ming left the airport and traveled toward the train station at an average speed of 61.2 km/h. Molly left at the same time and traveled in the opposite direction with an average speed of 78.6 km/h. Find the number of hours Molly needs to travel before they are 489.3 km apart.
- 18) A cattle train left Miami and traveled north at an average speed of 52 km/h. A passenger train left 4.1 hours later and traveled in the opposite direction with an average speed of 22.3 km/h. How long does the passenger train need to travel before the trains are 287.5 km apart?
- 19) Pranav and Imani left the movie theater at the same time. They drove in opposite directions. Imani drove 15 km/h faster than Pranav. After one hour they were 142 km apart. Find Pranav's speed.
- 20) Norachai left James' house and traveled toward the mountains at an average speed of 29.2 km/h. DeShawn left 1.5 hours later and traveled in the opposite direction with an average speed of 77 km/h. Find the number of hours DeShawn needs to travel before they are 362.4 km apart.
- 21) Huong left the airport and traveled toward the lake at an average speed of 62 mph. Cody left 0.8 hours later and traveled in the same direction but with an average speed of 78 mph. Find the number of hours Huong traveled before Cody caught up.
- 22) An Air Force plane left London and flew toward Jakarta at an average speed of 224.6 mph. A cargo plane left at the same time and flew in the opposite direction with an average speed of 350.2 mph. Find the number of hours the cargo plane needs to fly before the planes are 4885.8 mi. apart.
- 23) A jet and a passenger plane left Singapore at the same time. The planes flew in opposite directions. The passenger plane flew 208.7 mph faster than the jet. After eight hours they were 4712.8 mi. apart. Find the jet's speed.
- 24) A passenger train left Miami and traveled north at an average speed of 22.4 mph. A cattle train left 9.1 hours later and traveled in the same direction but with an average speed of 42 mph. How long did the passenger train travel before the cattle train caught up?



Answers to Assignment (ID: 10)

1) 6 hours

5) 6 hours

9) 6.5 hours

13) 4.2 hours

17) 3.5 hours

21) 3.9 hours

2) 42.4 km/h

6) 5.5 hours

10) 10 km/h

14) 57.5 mph

18) 1 hour

22) 8.5 hours

3) 292.8 km/h

7) 54 mph

11) 90 km/h

15) 3 hours

19) 63.5 km/h

23) 190.2 mph

4) 8.5 hours

8) 10.7 hours

12) 57.2 km/h

16) 9.2 hours

20) 3 hours

24) 19.5 hours

