## Assignment

1) Darryl left the White House and traveled toward the ferry office at an average speed of 25 mph . Some time later Jacob left traveling in the opposite direction with an average speed of 35 mph . After Darryl had traveled for four hours they were 170 mi . apart. How long did Jacob travel?
2) An aircraft carrier left the Dania Pier and traveled west at an average speed of 15 $\mathrm{km} / \mathrm{h}$. Some time later a fishing boat left traveling in the same direction but at an average speed of $20 \mathrm{~km} / \mathrm{h}$. After traveling for three hours the fishing boat caught up with the aircraft carrier. Find the number of hours the aircraft carrier traveled before the fishing boat caught up.
3) Abhasra left the White House and traveled toward the desert. Two hours later Julio left traveling at $35 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Abhasra. After traveling for three hours Julio finally caught up. Find Abhasra's average speed.
4) Huong made a trip to her cabin on the lake and back. The trip there took two hours and the trip back took three hours. She averaged 30 mph on the return trip. Find the average speed of the trip there.
5) A passenger plane left Tokyo and flew south. Two hours later a jet left flying at 275 mph in an effort to catch up to the passenger plane. After flying for nine hours the jet finally caught up. Find the passenger plane's average speed.

Date $\qquad$ Period $\qquad$
2) A diesel train left the station at the same time as a freight train. The trains traveled in opposite directions. The freight train traveled at a speed of 34 mph . After 13 hours they were 793 mi . apart. How fast did the diesel train travel?
4) An Air Force plane left London and flew north at an average speed of $200 \mathrm{~km} / \mathrm{h}$. Some time later a cargo plane left flying in the same direction but at an average speed of $220 \mathrm{~km} / \mathrm{h}$. After flying for ten hours the cargo plane caught up with the Air Force plane. Find the number of hours the Air Force plane flew before the cargo plane caught up.
6) Norachai left the mall and drove west at an average speed of $50 \mathrm{~km} / \mathrm{h}$. Chelsea left some time later driving in the opposite direction with an average speed of $20 \mathrm{~km} / \mathrm{h}$. After Norachai had driven for five hours they were 290 km apart. How long did Chelsea drive?
8) Matt made a trip to his friend's house and back. On the trip there he drove 24 mph and on the return trip he went 30 mph . How long did the trip there take if the return trip took four hours?
10) A cattle train left Abuja and traveled east. Three hours later a diesel train left traveling at $50 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the cattle train. After traveling for 12 hours the diesel train finally caught up. Find the cattle train's average speed.
11) Krystal made a trip to her cabin on the lake and back. On the trip there she traveled 44 $\mathrm{km} / \mathrm{h}$ and on the return trip she went 33 $\mathrm{km} / \mathrm{h}$. How long did the trip there take if the return trip took four hours?
13) Kristin drove to the town hall and back. On the trip there she drove $50 \mathrm{~km} / \mathrm{h}$ and on the return trip she went $60 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took five hours?
15) A diesel train left Bangalore and traveled toward the repair yards at an average speed of 55 mph . A freight train left some time later traveling in the opposite direction with an average speed of 80 mph . After the diesel train had traveled for 17 hours the trains were 2295 mi. apart. How long did the freight train travel?
17) An aircraft carrier left Port 59 and traveled toward St. Vincent at an average speed of 10 mph . A container ship left some time later traveling in the opposite direction with an average speed of 15 mph . After the aircraft carrier had traveled for three hours the ships were 75 mi . apart. How long did the container ship travel?
19) Lea left the science museum three hours before Mike. They drove in opposite directions. Mike drove at $75 \mathrm{~km} / \mathrm{h}$ for two hours. After this time they were 275 km apart. Find Lea's speed.
21) An Air Force plane left Rome at the same time as a cargo plane. The planes flew in opposite directions. The cargo plane flew at a speed of $500 \mathrm{~km} / \mathrm{h}$. After three hours they were 2235 km apart. How fast did the Air Force plane fly?
12) Ndiba drove to the ferry office and back. On the trip there he drove $30 \mathrm{~km} / \mathrm{h}$ and on the return trip he went $45 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took two hours?
14) Perry left the airport one hour before Krystal. They traveled in opposite directions. Krystal traveled at 40 mph for four hours. After this time they were 385 mi. apart. What was Perry's speed?
16) An Air Force plane left Sydney and flew south at an average speed of 415 mph . A jet left some time later flying in the opposite direction with an average speed of 255 mph . After the Air Force plane had flown for six hours the planes were 3765 mi . apart. Find the number of hours the jet flew.
18) A submarine left Port 59 at the same time as a cruise ship. The vessels traveled in opposite directions. The cruise ship traveled at a speed of $15 \mathrm{~km} / \mathrm{h}$. After seven hours they were 140 km apart. How fast did the submarine travel?
20) Jasmine left Perry's house and traveled north at an average speed of $40 \mathrm{~km} / \mathrm{h}$. Totsakan left some time later traveling in the opposite direction with an average speed of $80 \mathrm{~km} / \mathrm{h}$. After Jasmine had traveled for six hours they were 720 km apart. Find the number of hours Totsakan traveled.
22) An Air Force plane left the airport and flew toward Dublin. Two hours later a cargo plane left flying at 276 mph in an effort to catch up to the Air Force plane. After flying for ten hours the cargo plane finally caught up. Find the Air Force plane's average speed.
23) A freight train left Seoul and traveled toward the outer-most station. 12 hours later a diesel train left traveling at 30 mph in an effort to catch up to the freight train. After traveling for eight hours the diesel train finally caught up. What was the freight train's average speed?
24) Ryan left Jennifer's house and traveled toward the town hall at an average speed of 50 mph . Some time later Shreya left traveling in the same direction but at an average speed of 75 mph . After traveling for two hours Shreya caught up with Ryan. Find the number of hours Ryan traveled before Shreya caught up.

## Answers to Assignment (ID: 1)

| 1) 2 hours | 2) 27 mph | 3) 4 hours | 4) 11 hours |
| :--- | :--- | :--- | :--- |
| 5) $21 \mathrm{~km} / \mathrm{h}$ | 6) 2 hours | 7) 45 mph | 8) 5 hours |
| 9) 225 mph | 10) $40 \mathrm{~km} / \mathrm{h}$ | 11) 3 hours | 12) 3 hours |
| 13) 6 hours | 14) 45 mph | 15) 17 hours | 16) 5 hours |
| 17) 3 hours | 18) $5 \mathrm{~km} / \mathrm{h}$ | 19) $25 \mathrm{~km} / \mathrm{h}$ | 20) 6 hours |
| 21) $245 \mathrm{~km} / \mathrm{h}$ | 22) 230 mph | 23) 12 mph | 24) 3 hours |

1) 2 hours
2) $21 \mathrm{~km} / \mathrm{h}$
3) 225 mph
4) 6 hours
5) 3 hours
6) $245 \mathrm{~km} / \mathrm{h}$
7) 27 mph
8) 2 hours
9) $40 \mathrm{~km} / \mathrm{h}$
10) 45 mph
11) 230 mph
12) 4 hours
13) 11 hours
14) 5 hours
15) 3 hours
16) 5 hours
17) 6 hours
18) 3 hours

## Assignment

1) Carlos drove to the train station and back. The trip there took five hours and the trip back took three hours. What was Carlos' average speed on the trip there if he averaged $70 \mathrm{~km} / \mathrm{h}$ on the return trip?
2) Shanice left the hospital and traveled toward the capital at an average speed of $60 \mathrm{~km} / \mathrm{h}$. Willie left some time later traveling in the same direction at an average speed of 72 $\mathrm{km} / \mathrm{h}$. After traveling for five hours Willie caught up with Shanice. Find the number of hours Shanice traveled before Willie caught up.
3) A fishing boat made a trip to St. Vincent and back. On the trip there it traveled 10 mph and on the return trip it went 15 mph . How long did the trip there take if the return trip took six hours?
4) Pranav made a trip to the ferry office and back. On the trip there he drove 80 mph and on the return trip he went 60 mph . How long did the trip there take if the return trip took four hours?
5) Totsakan left home and traveled toward the lake at an average speed of $60 \mathrm{~km} / \mathrm{h}$. Some time later Ryan left traveling in the opposite direction with an average speed of $50 \mathrm{~km} / \mathrm{h}$. After Totsakan had traveled for five hours they were 500 km apart. How long did Ryan travel?
6) An aircraft carrier made a trip to Guam and back. The trip there took 12 hours and the trip back took seven hours. It averaged 12 $\mathrm{km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.

Date $\qquad$ Period $\qquad$
2) Micaela left home and drove west. Kathryn left one hour later driving at $60 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Micaela. After driving for five hours Kathryn finally caught up. What was Micaela's average speed?
4) Trevon left the movie theater and traveled toward the lake at an average speed of 24 $\mathrm{km} / \mathrm{h}$. Aliyah left some time later traveling in the same direction at an average speed of $30 \mathrm{~km} / \mathrm{h}$. After traveling for four hours Aliyah caught up with Trevon. How long did Trevon travel before Aliyah caught up?
6) Arjun traveled to his cabin on the lake and back. The trip there took five hours and the trip back took three hours. What was Arjun's average speed on the trip there if he averaged 60 mph on the return trip?
8) Sumalee made a trip to the recycling plant and back. On the trip there she drove 32 mph and on the return trip she went 80 mph . How long did the trip there take if the return trip took two hours?
10) A passenger train left Washington 15 hours before a freight train. The trains traveled in opposite directions. The freight train traveled at $15 \mathrm{~km} / \mathrm{h}$ for three hours. After this time the trains were 1575 km apart. What was the passenger train's speed?
12) An Air Force plane made a trip to Istanbul and back. On the trip there it flew $300 \mathrm{~km} / \mathrm{h}$ and on the return trip it went $200 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took 12 hours?
13) A freight train left Abuja at the same time as a diesel train. The trains traveled in opposite directions. The diesel train traveled at a speed of 70 mph . After four hours they were 340 mi . apart. How fast did the freight train travel?
15) Mofor left Willie's house one hour before Jasmine. They drove in opposite directions. Jasmine drove at 49 mph for five hours. After this time they were 479 mi . apart. Find Mofor's speed.
17) A passenger train left Berlin and traveled south at an average speed of $25 \mathrm{~km} / \mathrm{h}$. A freight train left some time later traveling in the same direction at an average speed of 30 $\mathrm{km} / \mathrm{h}$. After traveling for five hours the freight train caught up with the passenger train. How long did the passenger train travel before the freight train caught up?
19) A jet left Nairobi and flew south at an average speed of 162 mph . A passenger plane left some time later flying in the same direction at an average speed of 405 mph . After flying for four hours the passenger plane caught up with the jet. Find the number of hours the jet flew before the passenger plane caught up.
21) Jessica left the mall and drove toward her cabin on the lake at an average speed of 36 mph . Ted left some time later driving in the same direction at an average speed of 60 mph . After driving for three hours Ted caught up with Jessica. How long did Jessica drive before Ted caught up?
14) Amy left the mall at the same time as Natalie. They traveled in opposite directions. Natalie traveled at a speed of 70 mph . After three hours they were 300 mi . apart. How fast did Amy travel?
16) A cargo plane left London and flew toward the airshow at an average speed of 420 $\mathrm{km} / \mathrm{h}$. Some time later an Air Force plane left flying in the same direction but at an average speed of $462 \mathrm{~km} / \mathrm{h}$. After flying for ten hours the Air Force plane caught up with the cargo plane. How long did the cargo plane fly before the Air Force plane caught up?
18) A jet left New York and flew west. One hour later an Air Force plane left flying at $276 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the jet. After flying for five hours the Air Force plane finally caught up. Find the jet's average speed.
20) Joe left the White House and traveled toward the lake at an average speed of 56 mph . Some time later Mei left traveling in the same direction but at an average speed of 70 mph . After traveling for four hours Mei caught up with Joe. How long did Joe travel before Mei caught up?
22) Gabriella left the hospital and traveled toward the capital. Adam left one hour later traveling at 75 mph in an effort to catch up to Gabriella. After traveling for four hours Adam finally caught up. Find Gabriella's average speed.
23) Emily left school and drove toward the ferry office. Jack left one hour later driving at 48 mph in an effort to catch up to Emily. After driving for five hours Jack finally caught up. What was Emily's average speed?
24) An aircraft carrier made a trip to Madagascar and back. On the trip there it traveled $20 \mathrm{~km} / \mathrm{h}$ and on the return trip it went $6 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took ten hours?

## Answers to Assignment (ID: 2)

| 1) $42 \mathrm{~km} / \mathrm{h}$ | 2) $50 \mathrm{~km} / \mathrm{h}$ | 3) 6 hours | 4) 5 hours |
| :--- | :--- | :--- | :--- |
| 5) 9 hours | 6) 36 mph | 7) 3 hours | 8) 5 hours |
| 9) 4 hours | 10) $85 \mathrm{~km} / \mathrm{h}$ | 11) $7 \mathrm{~km} / \mathrm{h}$ | 12) 8 hours |
| 13) 15 mph | 14) 30 mph | 15) 39 mph | 16) 11 hours |
| 17) 6 hours | 18) $230 \mathrm{~km} / \mathrm{h}$ | 19) 10 hours | 20) 5 hours |
| 21) 5 hours | 22) 60 mph | 23) 40 mph | 24) 3 hours |

3) 6 hours
, 5 hours
4) 3 hours
5) 8 hours
6) 39 mph
7) 11 hours
8) 40 mph
9) 3 hours

## Assignment

1) A fishing boat traveled to Madagascar and back. The trip there took six hours and the trip back took eight hours. What was the fishing boat's average speed on the trip there if it averaged $21 \mathrm{~km} / \mathrm{h}$ on the return trip?
2) An Air Force plane made a trip to Moscow and back. On the trip there it flew $440 \mathrm{~km} / \mathrm{h}$ and on the return trip it went $320 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took 11 hours?
3) A container ship made a trip to Guam and back. On the trip there it traveled 20 mph and on the return trip it went 30 mph . How long did the trip there take if the return trip took eight hours?
4) An Air Force plane left Rome at the same time as a jet. The planes flew in opposite directions. The jet flew at a speed of 453 mph. After ten hours they were 6950 mi . apart. How fast did the Air Force plane fly?
5) Shreya left school and traveled toward the dump at an average speed of $30 \mathrm{~km} / \mathrm{h}$. Some time later Heather left traveling in the opposite direction with an average speed of $35 \mathrm{~km} / \mathrm{h}$. After Shreya had traveled for three hours they were 125 km apart. Find the number of hours Heather traveled.
6) Sarawong left school and traveled toward the mountains at an average speed of 45 $\mathrm{km} / \mathrm{h}$. Joe left some time later traveling in the opposite direction with an average speed of $50 \mathrm{~km} / \mathrm{h}$. After Sarawong had traveled for two hours they were 140 km apart. Find the number of hours Joe traveled.

Date $\qquad$ Period $\qquad$
2) Eduardo made a trip to the train station and back. The trip there took two hours and the trip back took five hours. He averaged 20 $\mathrm{km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
4) Elisa drove to her cabin on the lake and back. The trip there took five hours and the trip back took four hours. What was Elisa's average speed on the trip there if she averaged 30 mph on the return trip?
6) An aircraft carrier traveled to St. Vincent and back. The trip there took six hours and the trip back took nine hours. It averaged 8 mph on the return trip. Find the average speed of the trip there.
8) A jet left Tokyo and flew toward Istanbul at an average speed of $225 \mathrm{~km} / \mathrm{h}$. An Air Force plane left some time later flying in the opposite direction with an average speed of $335 \mathrm{~km} / \mathrm{h}$. After the jet had flown for four hours the planes were 2240 km apart. How long did the Air Force plane fly?
10) Jaidee left the science museum two hours before Totsakan. They drove in opposite directions. Totsakan drove at $30 \mathrm{~km} / \mathrm{h}$ for one hour. After this time they were 195 km apart. Find Jaidee's speed.
12) Mike left the hardware store and traveled toward the mountains at an average speed of 65 mph . Jaidee left some time later traveling in the opposite direction with an average speed of 65 mph . After Mike had traveled for four hours they were 325 mi . apart. Find the number of hours Jaidee traveled.
13) A submarine left Port 51 and traveled north at an average speed of 15 mph . Some time later a cruise ship left traveling in the opposite direction with an average speed of 15 mph . After the submarine had traveled for five hours the ships were 150 mi . apart. Find the number of hours the cruise ship traveled.
15) Rob left the White House and drove north. Arjun left two hours later driving at $30 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Rob. After driving for four hours Arjun finally caught up. What was Rob's average speed?
17) Asanji left school and drove toward the mountains at an average speed of $25 \mathrm{~km} / \mathrm{h}$. Some time later Shanice left driving in the same direction but at an average speed of 30 $\mathrm{km} / \mathrm{h}$. After driving for five hours Shanice caught up with Asanji. How long did Asanji drive before Shanice caught up?
19) A freight train made a trip to the fueling station and back. The trip there took 12 hours and the trip back took 15 hours. What was the freight train's average speed on the trip there if it averaged 12 mph on the return trip?
21) A cargo plane left the airport and flew toward Moscow at an average speed of 264 mph . A passenger plane left some time later flying in the same direction at an average speed of 330 mph . After flying for eight hours the passenger plane caught up with the cargo plane. How long did the cargo plane fly before the passenger plane caught up?
14) A cattle train left Seoul and traveled west. A passenger train left one hour later traveling at 80 mph in an effort to catch up to the cattle train. After traveling for seven hours the passenger train finally caught up. What was the cattle train's average speed?
16) Shayna left the airport and traveled toward her friend's house at an average speed of 24 $\mathrm{km} / \mathrm{h}$. Molly left some time later traveling in the same direction at an average speed of $40 \mathrm{~km} / \mathrm{h}$. After traveling for three hours Molly caught up with Shayna. Find the number of hours Shayna traveled before Molly caught up.
18) Brenda traveled to the lake and back. The trip there took four hours and the trip back took six hours. She averaged $50 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
20) A passenger train left Seoul and traveled south. A cattle train left eight hours later traveling at 85 mph in an effort to catch up to the passenger train. After traveling for nine hours the cattle train finally caught up. Find the passenger train's average speed.
22) Jose traveled to the lake and back. The trip there took four hours and the trip back took three hours. What was Jose's average speed on the trip there if he averaged 40 mph on the return trip?
23) Julia made a trip to her friend's house and back. The trip there took four hours and the trip back took five hours. She averaged 64 $\mathrm{km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
24) A fishing boat traveled to a navigational buoy and back. On the trip there it traveled $8 \mathrm{~km} / \mathrm{h}$ and on the return trip it went 20
$\mathrm{km} / \mathrm{h}$. How long did the trip there take if the return trip took two hours?

## Answers to Assignment (ID: 3)

| 1) $28 \mathrm{~km} / \mathrm{h}$ | 2) $50 \mathrm{~km} / \mathrm{h}$ | 3) 8 hours | 4) 24 mph |
| :--- | :--- | :--- | :--- |
| 5) 12 hours | 6) 12 mph | 7) 242 mph | 8) 4 hours |
| 9) 1 hour | 10) $55 \mathrm{~km} / \mathrm{h}$ | 11) 1 hour | 12) 1 hour |
| 13) 5 hours | 14) 70 mph | 15) $20 \mathrm{~km} / \mathrm{h}$ | 16) 5 hours |
| 17) 6 hours | 18) $75 \mathrm{~km} / \mathrm{h}$ | 19) 15 mph | 20) 45 mph |
| 21) 10 hours | 22) 30 mph | 23) $80 \mathrm{~km} / \mathrm{h}$ | 24) 5 hours |

3) 8 hours
) 24 mph
4) 242 mph
5) 1 hour
6) $20 \mathrm{~km} / \mathrm{h}$
7) 15 mph
8) $80 \mathrm{~km} / \mathrm{h}$
9) 5 hours

## Assignment

1) A jet flew to Las Vegas and back. On the trip there it flew $225 \mathrm{~km} / \mathrm{h}$ and on the return trip it went $180 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took ten hours?
2) A cargo plane left Nairobi at the same time as an Air Force plane. The planes flew in opposite directions. The Air Force plane flew at a speed of 400 mph . After seven hours they were 4620 mi. apart. How fast did the cargo plane fly?
3) Alberto left the science museum and traveled toward the recycling plant at an average speed of 55 mph . Emily left some time later traveling in the opposite direction with an average speed of 60 mph . After Alberto had traveled for one hour they were 115 mi . apart. Find the number of hours Emily traveled.
4) Cody left the airport at the same time as Lea. They drove in opposite directions. Lea drove at a speed of $70 \mathrm{~km} / \mathrm{h}$. After two hours they were 196 km apart. How fast did Cody drive?
5) A diesel train left Berlin and traveled north at an average speed of $12 \mathrm{~km} / \mathrm{h}$. A cattle train left some time later traveling in the same direction at an average speed of 80 $\mathrm{km} / \mathrm{h}$. After traveling for three hours the cattle train caught up with the diesel train. How long did the diesel train travel before the cattle train caught up?

Date $\qquad$ Period $\qquad$
2) A passenger train left Washington and traveled west at an average speed of 10 mph . A freight train left some time later traveling in the opposite direction with an average speed of 30 mph . After the passenger train had traveled for ten hours the trains were 340 mi . apart. Find the number of hours the freight train traveled.
4) Scott made a trip to the town hall and back. On the trip there he traveled 40 mph and on the return trip he went 60 mph . How long did the trip there take if the return trip took four hours?
6) Castel left Lea's house three hours before Jacob. They drove in opposite directions. Jacob drove at $50 \mathrm{~km} / \mathrm{h}$ for one hour. After this time they were 270 km apart. What was Castel's speed?
8) A container ship left the Azores at the same time as a cruise ship. The ships traveled in opposite directions. The cruise ship traveled at a speed of $25 \mathrm{~km} / \mathrm{h}$. After one hour they were 48 km apart. How fast did the container ship travel?
10) Ming left Jack's house and drove north. One hour later Jenny left driving at 30 mph in an effort to catch up to Ming. After driving for four hours Jenny finally caught up. What was Ming's average speed?
11) Kali left the airport and drove toward the ferry office. One hour later Ted left driving at 60 mph in an effort to catch up to Kali. After driving for five hours Ted finally caught up. Find Kali's average speed.
13) Norachai left the movie theater and drove toward the lake at an average speed of 21 mph . Some time later Jack left driving in the same direction but at an average speed of 35 mph . After driving for three hours Jack caught up with Norachai. Find the number of hours Norachai drove before Jack caught up.
15) A container ship left Hawaii and traveled toward a navigational buoy. A cruise ship left four hours later traveling at $30 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the container ship. After traveling for eight hours the cruise ship finally caught up. What was the container ship's average speed?
17) A diesel train traveled to the outer-most station and back. On the trip there it traveled $35 \mathrm{~km} / \mathrm{h}$ and on the return trip it went $15 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took seven hours?
19) Beth traveled to the town hall and back. The trip there took five hours and the trip back took two hours. She averaged 60 mph on the return trip. Find the average speed of the trip there.
21) A fishing boat traveled to St. Vincent and back. On the trip there it traveled $24 \mathrm{~km} / \mathrm{h}$ and on the return trip it went $30 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took eight hours?
12) Abhasra left the mall and traveled toward the recycling plant at an average speed of 28 mph . Some time later James left traveling in the same direction but at an average speed of 70 mph . After traveling for two hours James caught up with Abhasra. How long did Abhasra travel before James caught up?
14) A passenger train left Miami and traveled east at an average speed of $60 \mathrm{~km} / \mathrm{h}$. A cattle train left some time later traveling in the same direction at an average speed of 90 $\mathrm{km} / \mathrm{h}$. After traveling for four hours the cattle train caught up with the passenger train. Find the number of hours the passenger train traveled before the cattle train caught up.
16) Jennifer made a trip to the lake and back. On the trip there she drove 60 mph and on the return trip she went 40 mph . How long did the trip there take if the return trip took six hours?
18) Krystal made a trip to her friend's house and back. On the trip there she traveled 30 mph and on the return trip she went 36 mph . How long did the trip there take if the return trip took five hours?
20) Kristin left the mall four hours before John. They drove in opposite directions. John drove at 45 mph for two hours. After this time they were 210 mi . apart. What was Kristin's speed?
22) A container ship made a trip to St. Vincent and back. The trip there took seven hours and the trip back took five hours. It averaged $21 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
23) Kim drove to the town hall and back. The trip there took five hours and the trip back took four hours. She averaged $70 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
24) Julio left the movie theater one hour before Huong. They drove in opposite directions. Huong drove at $45 \mathrm{~km} / \mathrm{h}$ for three hours. After this time they were 295 km apart. What was Julio's speed?

## Answers to Assignment (ID: 4)

| 1) 8 hours | 2) 8 hours | 3) 260 mph | 4) 6 hours |
| :--- | :--- | :--- | :--- |
| 5) 1 hour | 6) $55 \mathrm{~km} / \mathrm{h}$ | 7) $28 \mathrm{~km} / \mathrm{h}$ | 8) $23 \mathrm{~km} / \mathrm{h}$ |
| 9) 20 hours | 10) 24 mph | 11) 50 mph | 12) 5 hours |
| 13) 5 hours | 14) 6 hours | 15) $20 \mathrm{~km} / \mathrm{h}$ | 16) 4 hours |
| 17) 3 hours | 18) 6 hours | 19) 24 mph | 20) 20 mph |
| 21) 10 hours | 22) $15 \mathrm{~km} / \mathrm{h}$ | 23) $56 \mathrm{~km} / \mathrm{h}$ | 24) $40 \mathrm{~km} / \mathrm{h}$ |

## Assignment

1) Maria left Sumalee's house and traveled toward her friend's house at an average speed of 48 mph . Sarawong left some time later traveling in the opposite direction with an average speed of 58 mph . After Maria had traveled for five hours they were 530 mi. apart. Find the number of hours Sarawong traveled.
2) An Air Force plane left Los Angeles and flew toward Moscow. A jet left four hours later flying at 288 mph in an effort to catch up to the Air Force plane. After flying for five hours the jet finally caught up. What was the Air Force plane's average speed?
3) A cruise ship left the Dania Pier and traveled west at an average speed of 15 $\mathrm{km} / \mathrm{h}$. Some time later a container ship left traveling in the opposite direction with an average speed of $10 \mathrm{~km} / \mathrm{h}$. After the cruise ship had traveled for nine hours the vessels were 195 km apart. How long did the container ship travel?
4) Ryan left the mall and traveled toward the train station. Three hours later Molly left traveling at $75 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Ryan. After traveling for two hours Molly finally caught up. What was Ryan's average speed?
5) A container ship left Hawaii and traveled west at an average speed of 10 mph . Some time later a cruise ship left traveling in the same direction but at an average speed of 15 mph . After traveling for eight hours the cruise ship caught up with the container ship. How long did the container ship travel before the cruise ship caught up?

Date $\qquad$ Period $\qquad$
2) Lea left the airport two hours before Jaidee. They drove in opposite directions. Jaidee drove at 75 mph for one hour. After this time they were 315 mi . apart. Find Lea's speed.
4) An aircraft carrier left Port 40 and traveled toward St. Vincent at an average speed of 5 mph . Some time later a fishing boat left traveling in the same direction but at an average speed of 6 mph . After traveling for ten hours the fishing boat caught up with the aircraft carrier. Find the number of hours the aircraft carrier traveled before the fishing boat caught up.
6) A jet left Rome and flew toward the maintenance facility at an average speed of $160 \mathrm{~km} / \mathrm{h}$. A passenger plane left some time later flying in the opposite direction with an average speed of $230 \mathrm{~km} / \mathrm{h}$. After the jet had flown for eight hours the planes were 2430 km apart. Find the number of hours the passenger plane flew.
8) Carlos left the movie theater and traveled toward the ocean at an average speed of 48 mph . Some time later Darryl left traveling in the same direction but at an average speed of 60 mph . After traveling for four hours Darryl caught up with Carlos. How long did Carlos travel before Darryl caught up?
10) A jet left the airport and flew west at an average speed of 150 mph . A passenger plane left some time later flying in the same direction at an average speed of 275 mph . After flying for six hours the passenger plane caught up with the jet. How long did the jet fly before the passenger plane caught up?
11) A cattle train traveled to Las Vegas and back. The trip there took six hours and the trip back took four hours. What was the cattle train's average speed on the trip there if it averaged 45 mph on the return trip?
13) Arjun traveled to his friend's house and back. On the trip there he traveled $60 \mathrm{~km} / \mathrm{h}$ and on the return trip he went $40 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took three hours?
15) Sumalee drove to the lake and back. The trip there took three hours and the trip back took four hours. She averaged $24 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
17) A diesel train made a trip to the repair yards and back. On the trip there it traveled 70 mph and on the return trip it went 20 mph . How long did the trip there take if the return trip took seven hours?
19) Lisa left school at the same time as Natalie. They drove in opposite directions. Natalie drove at a speed of 50 mph . After two hours they were 180 mi . apart. How fast did Lisa drive?
21) Amy left the White House and traveled toward the town hall at an average speed of $25 \mathrm{~km} / \mathrm{h}$. Lea left some time later traveling in the opposite direction with an average speed of $70 \mathrm{~km} / \mathrm{h}$. After Amy had traveled for four hours they were 310 km apart. Find the number of hours Lea traveled.
12) Kathryn made a trip to her cabin on the lake and back. The trip there took four hours and the trip back took five hours. She averaged $48 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
14) Pranav left home and traveled toward the recycling plant. Scott left one hour later traveling at $28 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Pranav. After traveling for three hours Scott finally caught up. What was Pranav's average speed?
16) Totsakan made a trip to his friend's house and back. The trip there took two hours and the trip back took five hours. What was Totsakan's average speed on the trip there if he averaged 32 mph on the return trip?
18) Mary left home and traveled toward the train station at an average speed of 40 mph . Some time later Gabriella left traveling in the opposite direction with an average speed of 55 mph . After Mary had traveled for six hours they were 295 mi. apart. How long did Gabriella travel?
20) Paul left the hospital and drove toward his friend's house at an average speed of 70 $\mathrm{km} / \mathrm{h}$. Eugene left some time later driving in the opposite direction with an average speed of $65 \mathrm{~km} / \mathrm{h}$. After Paul had driven for six hours they were 615 km apart. Find the number of hours Eugene drove.
22) A cruise ship left Diego Garcia and traveled toward Guam at an average speed of 24 $\mathrm{km} / \mathrm{h}$. A fishing boat left some time later traveling in the opposite direction with an average speed of $9 \mathrm{~km} / \mathrm{h}$. After the cruise ship had traveled for 13 hours the vessels were 348 km apart. Find the number of hours the fishing boat traveled.
23) A cargo plane left London at the same time as a passenger plane. The planes flew in opposite directions. The passenger plane flew at a speed of 495 mph . After 11 hours they were 8690 mi. apart. How fast did the cargo plane fly?
24) A passenger train left Bangalore one hour before a freight train. The trains traveled in opposite directions. The freight train traveled at 80 mph for ten hours. After this time the trains were 1405 mi. apart. Find the passenger train's speed.

## Answers to Assignment (ID: 5)

| 1) 5 hours | 2) 80 mph | 3) 160 mph | 4) 12 hours |
| :--- | :--- | :--- | :--- |
| 5) 6 hours | 6) 5 hours | 7) $30 \mathrm{~km} / \mathrm{h}$ | 8) 5 hours |
| 9) 12 hours | 10) 11 hours | 11) 30 mph | 12) $60 \mathrm{~km} / \mathrm{h}$ |
| 13) 2 hours | 14) $21 \mathrm{~km} / \mathrm{h}$ | 15) $32 \mathrm{~km} / \mathrm{h}$ | 16) 80 mph |
| 17) 2 hours | 18) 1 hour | 19) 40 mph | 20) 3 hours |
| 21) 3 hours | 22) 4 hours | 23) 295 mph | 24) 55 mph |

## Assignment

1) Joe left the science museum and traveled toward the ocean. Jill left two hours later traveling at $50 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Joe. After traveling for three hours Jill finally caught up. Find Joe's average speed.
2) Jessica left the hospital and traveled toward the ferry office. Perry left two hours later traveling at $70 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Jessica. After traveling for three hours Perry finally caught up. Find Jessica's average speed.
3) A jet made a trip to the maintenance facility and back. The trip there took five hours and the trip back took nine hours. It averaged $210 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
4) Kayla left the science museum and traveled toward the mountains. One hour later Ndiba left traveling at 80 mph in an effort to catch up to Kayla. After traveling for four hours Ndiba finally caught up. What was Kayla's average speed?
5) Dan made a trip to the train station and back. On the trip there he drove 40 mph and on the return trip he went 60 mph . How long did the trip there take if the return trip took two hours?

Date $\qquad$ Period $\qquad$
2) Jenny left the mall and drove toward the train station at an average speed of 50 mph . Some time later James left driving in the same direction but at an average speed of 75 mph . After driving for four hours James caught up with Jenny. Find the number of hours Jenny drove before James caught up.
4) A cattle train left Berlin and traveled west at an average speed of 45 mph . Some time later a diesel train left traveling in the opposite direction with an average speed of 60 mph . After the cattle train had traveled for 17 hours the trains were 1245 mi . apart. Find the number of hours the diesel train traveled.
6) A passenger plane left New York and flew toward Jakarta at an average speed of 322 $\mathrm{km} / \mathrm{h}$. Some time later a cargo plane left flying in the same direction but at an average speed of $460 \mathrm{~km} / \mathrm{h}$. After flying for seven hours the cargo plane caught up with the passenger plane. How long did the passenger plane fly before the cargo plane caught up?
8) Stephanie left the White House and drove toward the ocean. Krystal left one hour later driving at 60 mph in an effort to catch up to Stephanie. After driving for two hours Krystal finally caught up. What was Stephanie's average speed?
10) Eduardo made a trip to his cabin on the lake and back. On the trip there he traveled 42 mph and on the return trip he went 35 mph . How long did the trip there take if the return trip took six hours?
11) Elisa made a trip to her friend's house and back. The trip there took five hours and the trip back took three hours. What was Elisa's average speed on the trip there if she averaged $70 \mathrm{~km} / \mathrm{h}$ on the return trip?
13) An aircraft carrier left Port 37 and traveled north at an average speed of $20 \mathrm{~km} / \mathrm{h}$. A container ship left some time later traveling in the opposite direction with an average speed of $20 \mathrm{~km} / \mathrm{h}$. After the aircraft carrier had traveled for five hours the ships were 200 km apart. How long did the container ship travel?
15) A passenger train left Washington and traveled toward the fueling station at an average speed of $57 \mathrm{~km} / \mathrm{h}$. A freight train left some time later traveling in the opposite direction with an average speed of $36 \mathrm{~km} / \mathrm{h}$. After the passenger train had traveled for two hours the trains were 150 km apart. How long did the freight train travel?
17) A container ship left the Dania Pier and traveled south at an average speed of 25 mph . Some time later an aircraft carrier left traveling in the opposite direction with an average speed of 15 mph . After the container ship had traveled for two hours the ships were 65 mi . apart. How long did the aircraft carrier travel?
19) A jet left Rome one hour before a passenger plane. The planes flew in opposite directions. The passenger plane flew at 450 $\mathrm{km} / \mathrm{h}$ for three hours. After this time the planes were 2550 km apart. What was the jet's speed?
21) John left the airport and traveled south. Aliyah left three hours later traveling at 65 $\mathrm{km} / \mathrm{h}$ in an effort to catch up to John. After traveling for two hours Aliyah finally caught up. Find John's average speed.
12) An Air Force plane flew to Dublin and back. The trip there took ten hours and the trip back took seven hours. What was the Air Force plane's average speed on the trip there if it averaged $400 \mathrm{~km} / \mathrm{h}$ on the return trip?
14) Stefan made a trip to the ferry office and back. The trip there took five hours and the trip back took four hours. He averaged 65 mph on the return trip. Find the average speed of the trip there.
16) Shreya traveled to the town hall and back. The trip there took four hours and the trip back took three hours. She averaged 80 mph on the return trip. Find the average speed of the trip there.
18) A passenger train left Seoul and traveled south at an average speed of $52 \mathrm{~km} / \mathrm{h}$. Some time later a cattle train left traveling in the opposite direction with an average speed of $80 \mathrm{~km} / \mathrm{h}$. After the passenger train had traveled for 12 hours the trains were 1344 km apart. How long did the cattle train travel?
20) A submarine left Port 24 and traveled north. Seven hours later a cruise ship left traveling at $30 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the submarine. After traveling for three hours the cruise ship finally caught up. What was the submarine's average speed?
22) Shayna left the movie theater one hour before Darryl. They traveled in opposite directions. Darryl traveled at 75 mph for three hours. After this time they were 525 mi. apart. What was Shayna's speed?
23) Rob left the science museum and drove toward the mountains at an average speed of 35 mph . Some time later Shanice left driving in the same direction but at an average speed of 42 mph . After driving for five hours Shanice caught up with Rob. Find the number of hours Rob drove before Shanice caught up.
24) Asanji left the hardware store and drove toward the train station. One hour later Cody left driving at 30 mph in an effort to catch up to Asanji. After driving for four hours Cody finally caught up. Find Asanji's average speed.

## Answers to Assignment (ID: 6)

| 1) $30 \mathrm{~km} / \mathrm{h}$ | 2) 6 hours | 3) $42 \mathrm{~km} / \mathrm{h}$ | 4) 8 hours |
| :--- | :--- | :--- | :--- |
| 5) $378 \mathrm{~km} / \mathrm{h}$ | 6) 10 hours | 7) 64 mph | 8) 40 mph |
| 9) 3 hours | 10) 5 hours | 11) $42 \mathrm{~km} / \mathrm{h}$ | 12) $280 \mathrm{~km} / \mathrm{h}$ |
| 13) 5 hours | 14) 52 mph | 15) 1 hour | 16) 60 mph |
| 17) 1 hour | 18) 9 hours | 19) $300 \mathrm{~km} / \mathrm{h}$ | 20) $9 \mathrm{~km} / \mathrm{h}$ |
| 21) $26 \mathrm{~km} / \mathrm{h}$ | 22) 75 mph | 23) 6 hours | 24) 24 mph |

## Assignment

1) Mei drove to the train station and back. The trip there took four hours and the trip back took five hours. She averaged $44 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
2) A cargo plane left Tokyo and flew south at an average speed of 180 mph . A passenger plane left some time later flying in the same direction at an average speed of 200 mph . After flying for nine hours the passenger plane caught up with the cargo plane. Find the number of hours the cargo plane flew before the passenger plane caught up.
3) Jose made a trip to his cabin on the lake and back. On the trip there he drove $75 \mathrm{~km} / \mathrm{h}$ and on the return trip he went $45 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took five hours?
4) A cruise ship made a trip to Madagascar and back. The trip there took ten hours and the trip back took nine hours. It averaged 10 mph on the return trip. Find the average speed of the trip there.
5) A cattle train traveled to New York and back. The trip there took 19 hours and the trip back took 17 hours. What was the cattle train's average speed on the trip there if it averaged $76 \mathrm{~km} / \mathrm{h}$ on the return trip?
6) Danielle left the hospital one hour before Eugene. They drove in opposite directions. Eugene drove at $30 \mathrm{~km} / \mathrm{h}$ for five hours. After this time they were 540 km apart. What was Danielle's speed?

Date $\qquad$ Period $\qquad$
2) Adam left the science museum and traveled south at an average speed of $48 \mathrm{~km} / \mathrm{h}$. Some time later Castel left traveling in the same direction but at an average speed of 72 $\mathrm{km} / \mathrm{h}$. After traveling for two hours Castel caught up with Adam. How long did Adam travel before Castel caught up?
4) James left Jacob's house and traveled toward the mountains at an average speed of 27 $\mathrm{km} / \mathrm{h}$. Some time later Alberto left traveling in the same direction but at an average speed of $45 \mathrm{~km} / \mathrm{h}$. After traveling for three hours Alberto caught up with James. Find the number of hours James traveled before Alberto caught up.
6) Julia traveled to the ferry office and back. On the trip there she traveled 72 mph and on the return trip she went 60 mph . How long did the trip there take if the return trip took six hours?
8) A cargo plane made a trip to Dublin and back. The trip there took four hours and the trip back took ten hours. It averaged 166 mph on the return trip. Find the average speed of the trip there.
10) Nicole drove to the ferry office and back. On the trip there she drove $45 \mathrm{~km} / \mathrm{h}$ and on the return trip she went $30 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took six hours?
12) A diesel train left Berlin five hours before a freight train. The trains traveled in opposite directions. The freight train traveled at 74 $\mathrm{km} / \mathrm{h}$ for eight hours. After this time the trains were 1216 km apart. Find the diesel train's speed.
13) A freight train left the station at the same time as a passenger train. The trains traveled in opposite directions. The passenger train traveled at a speed of 55 mph . After 15 hours they were 1425 mi . apart. How fast did the freight train travel?
15) A passenger plane left Nairobi and flew west at an average speed of 156 mph . A cargo plane left some time later flying in the same direction at an average speed of 195 mph . After flying for four hours the cargo plane caught up with the passenger plane. Find the number of hours the passenger plane flew before the cargo plane caught up.
17) Ming left the mall and traveled west at an average speed of $60 \mathrm{~km} / \mathrm{h}$. Some time later Jack left traveling in the opposite direction with an average speed of $70 \mathrm{~km} / \mathrm{h}$. After Ming had traveled for one hour they were 130 km apart. Find the number of hours Jack traveled.
19) Abhasra left the hospital and traveled toward the train station at an average speed of $40 \mathrm{~km} / \mathrm{h}$. Brenda left some time later traveling in the same direction at an average speed of $60 \mathrm{~km} / \mathrm{h}$. After traveling for two hours Brenda caught up with Abhasra. How long did Abhasra travel before Brenda caught up?
21) A passenger plane left Paris and flew east. A jet left two hours later flying at 345 mph in an effort to catch up to the passenger plane. After flying for four hours the jet finally caught up. Find the passenger plane's average speed.
14) An aircraft carrier left Hawaii and traveled toward dry dock at an average speed of 25 mph . A fishing boat left some time later traveling in the opposite direction with an average speed of 15 mph . After the aircraft carrier had traveled for nine hours the vessels were 285 mi. apart. How long did the fishing boat travel?
16) Aliyah left the airport three hours before Mark. They traveled in opposite directions. Mark traveled at 60 mph for three hours. After this time they were 600 mi . apart. What was Aliyah's speed?
18) Kali left Rob's house and drove toward the lake at an average speed of $24 \mathrm{~km} / \mathrm{h}$. Perry left some time later driving in the same direction at an average speed of $40 \mathrm{~km} / \mathrm{h}$. After driving for three hours Perry caught up with Kali. How long did Kali drive before Perry caught up?
20) A cattle train left Miami and traveled toward the outer-most station. Five hours later a diesel train left traveling at $40 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the cattle train. After traveling for three hours the diesel train finally caught up. Find the cattle train's average speed.
22) An aircraft carrier made a trip to Madagascar and back. On the trip there it traveled 10 mph and on the return trip it went 25 mph . How long did the trip there take if the return trip took four hours?
23) Bill made a trip to the lake and back. The trip there took five hours and the trip back took two hours. He averaged 75 mph on the return trip. Find the average speed of the trip there.
24) Jennifer left home and drove toward the dump. Three hours later Lisa left driving at $70 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Jennifer. After driving for two hours Lisa finally caught up. Find Jennifer's average speed.

## Answers to Assignment (ID: 7)

| 1) $55 \mathrm{~km} / \mathrm{h}$ | 2) 3 hours | 3) 10 hours | 4) 5 hours |
| :--- | :--- | :--- | :--- |
| 5) 3 hours | 6) 5 hours | 7) 9 mph | 8) 415 mph |
| 9) $68 \mathrm{~km} / \mathrm{h}$ | 10) 4 hours | 11) $65 \mathrm{~km} / \mathrm{h}$ | 12) $48 \mathrm{~km} / \mathrm{h}$ |
| 13) 40 mph | 14) 4 hours | 15) 5 hours | 16) 70 mph |
| 17) 1 hour | 18) 5 hours | 19) 3 hours | 20) $15 \mathrm{~km} / \mathrm{h}$ |
| 21) 230 mph | 22) 10 hours | 23) 30 mph | 24) $28 \mathrm{~km} / \mathrm{h}$ |

3) 10 hours
) 5 hours
4) 9 mph
5) $48 \mathrm{~km} / \mathrm{h}$
6) 5 hours
7) 3 hours
8) $28 \mathrm{~km} / \mathrm{h}$

## Assignment

1) Krystal left school and drove toward the town hall. One hour later John left driving at $48 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Krystal. After driving for five hours John finally caught up. Find Krystal's average speed.
2) A cattle train traveled to New York and back. The trip there took five hours and the trip back took nine hours. What was the cattle train's average speed on the trip there if it averaged $40 \mathrm{~km} / \mathrm{h}$ on the return trip?
3) Jack traveled to the town hall and back. On the trip there he traveled 50 mph and on the return trip he went 40 mph . How long did the trip there take if the return trip took five hours?
4) Julio left the White House and drove toward his cabin on the lake at an average speed of 30 mph . Abhasra left some time later driving in the opposite direction with an average speed of 50 mph . After Julio had driven for five hours they were 300 mi . apart. How long did Abhasra drive?
5) An aircraft carrier left the Dania Pier and traveled toward Tahiti at an average speed of $15 \mathrm{~km} / \mathrm{h}$. Some time later a fishing boat left traveling in the opposite direction with an average speed of $25 \mathrm{~km} / \mathrm{h}$. After the aircraft carrier had traveled for seven hours the vessels were 280 km apart. Find the number of hours the fishing boat traveled.

Date
Period $\qquad$
2) A submarine traveled to Tahiti and back. On the trip there it traveled $7 \mathrm{~km} / \mathrm{h}$ and on the return trip it went $10 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took seven hours?
4) A cargo plane made a trip to Dublin and back. The trip there took eight hours and the trip back took ten hours. What was the cargo plane's average speed on the trip there if it averaged 160 mph on the return trip?
6) Kim left the hospital and traveled east at an average speed of 51 mph . Some time later Sumalee left traveling in the opposite direction with an average speed of 73 mph . After Kim had traveled for four hours they were 496 mi . apart. Find the number of hours Sumalee traveled.
8) Maria traveled to the ferry office and back. The trip there took four hours and the trip back took three hours. What was Maria's average speed on the trip there if she averaged $80 \mathrm{~km} / \mathrm{h}$ on the return trip?
10) An Air Force plane left New York and flew west at an average speed of $160 \mathrm{~km} / \mathrm{h}$. A jet left some time later flying in the opposite direction with an average speed of 180 $\mathrm{km} / \mathrm{h}$. After the Air Force plane had flown for five hours the planes were 1700 km apart. How long did the jet fly?
11) Ashley left the hardware store and traveled toward her cabin on the lake at an average speed of $60 \mathrm{~km} / \mathrm{h}$. Some time later Kathryn left traveling in the opposite direction with an average speed of $80 \mathrm{~km} / \mathrm{h}$. After Ashley had traveled for four hours they were 560 km apart. Find the number of hours Kathryn traveled.
13) Daniel left the science museum and drove toward the lake. Three hours later Darryl left driving at 50 mph in an effort to catch up to Daniel. After driving for two hours Darryl finally caught up. What was Daniel's average speed?
15) A diesel train left Seoul and traveled toward the fueling station. One hour later a cattle train left traveling at $80 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the diesel train. After traveling for three hours the cattle train finally caught up. What was the diesel train's average speed?
17) An aircraft carrier left the Azores and traveled toward a navigational buoy. A container ship left one hour later traveling at $30 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the aircraft carrier. After traveling for five hours the container ship finally caught up. What was the aircraft carrier's average speed?
19) Arjun drove to the recycling plant and back. The trip there took three hours and the trip back took two hours. He averaged 51 mph on the return trip. Find the average speed of the trip there.
21) A freight train made a trip to New York and back. On the trip there it traveled 35 mph and on the return trip it went 20 mph . How long did the trip there take if the return trip took seven hours?
12) Chelsea left the mall four hours before Imani. They traveled in opposite directions. Imani traveled at 30 mph for one hour. After this time they were 380 mi . apart. What was Chelsea's speed?
14) Ryan left the hospital and drove toward the lake at an average speed of 40 mph . Some time later Trevon left driving in the same direction but at an average speed of 60 mph . After driving for two hours Trevon caught up with Ryan. Find the number of hours Ryan drove before Trevon caught up.
16) A fishing boat left Hawaii and traveled south. Two hours later a cruise ship left traveling at $11 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the fishing boat. After traveling for nine hours the cruise ship finally caught up. What was the fishing boat's average speed?
18) An Air Force plane left Rome and flew toward Istanbul at an average speed of 234 $\mathrm{km} / \mathrm{h}$. A jet left some time later flying in the same direction at an average speed of 390 $\mathrm{km} / \mathrm{h}$. After flying for three hours the jet caught up with the Air Force plane. Find the number of hours the Air Force plane flew before the jet caught up.
20) Kathryn left the hardware store and drove toward the dump at an average speed of 32 mph . Some time later Danielle left driving in the same direction but at an average speed of 40 mph . After driving for four hours Danielle caught up with Kathryn. How long did Kathryn drive before Danielle caught up?
22) A passenger train made a trip to Johannesburg and back. On the trip there it traveled 85 mph and on the return trip it went 50 mph . How long did the trip there take if the return trip took 17 hours?
23) A container ship made a trip to St. Vincent and back. On the trip there it traveled 15 $\mathrm{km} / \mathrm{h}$ and on the return trip it went $10 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took three hours?
24) Heather left school two hours before Jacob. They drove in opposite directions. Jacob drove at $61 \mathrm{~km} / \mathrm{h}$ for one hour. After this time they were 277 km apart. Find Heather's speed.

## Answers to Assignment (ID: 8)

| 1) $40 \mathrm{~km} / \mathrm{h}$ | 2) 10 hours | 3) $72 \mathrm{~km} / \mathrm{h}$ | 4) 200 mph |
| :--- | :--- | :--- | :--- |
| 5) 4 hours | 6) 4 hours | 7) 3 hours | 8) $60 \mathrm{~km} / \mathrm{h}$ |
| 9) 7 hours | 10) 5 hours | 11) 4 hours | 12) 70 mph |
| 13) 20 mph | 14) 3 hours | 15) $60 \mathrm{~km} / \mathrm{h}$ | 16) $9 \mathrm{~km} / \mathrm{h}$ |
| 17) $25 \mathrm{~km} / \mathrm{h}$ | 18) 5 hours | 19) 34 mph | 20) 5 hours |
| 21) 4 hours | 22) 10 hours | 23) 2 hours | 24) $72 \mathrm{~km} / \mathrm{h}$ |

1) $40 \mathrm{~km} / \mathrm{h}$
2) 10 hours
3) $72 \mathrm{~km} / \mathrm{h}$
4) 200 mph
5) 3 hours
6) 70 mph
7) $60 \mathrm{~km} / \mathrm{h}$
8) 34 mph
9) $72 \mathrm{~km} / \mathrm{h}$

## Assignment

1) Amy left the science museum one hour before Julio. They drove in opposite directions. Julio drove at 75 mph for four hours. After this time they were 550 mi . apart. Find Amy's speed.
2) Lisa made a trip to her cabin on the lake and back. On the trip there she traveled $50 \mathrm{~km} / \mathrm{h}$ and on the return trip she went $75 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took two hours?
3) A diesel train left the station at the same time as a cattle train. The trains traveled in opposite directions. The cattle train traveled at a speed of 70 mph . After 20 hours they were 2600 mi . apart. How fast did the diesel train travel?
4) Jill left home and traveled toward the recycling plant at an average speed of 28 $\mathrm{km} / \mathrm{h}$. Some time later Jack left traveling in the same direction but at an average speed of $42 \mathrm{~km} / \mathrm{h}$. After traveling for two hours Jack caught up with Jill. How long did Jill travel before Jack caught up?
5) Jenny left Aliyah's house three hours before Brenda. They drove in opposite directions. Brenda drove at $53 \mathrm{~km} / \mathrm{h}$ for two hours. After this time they were 231 km apart. What was Jenny's speed?

Date $\qquad$ Period
2) Paul made a trip to the ferry office and back. On the trip there he drove 27 mph and on the return trip he went 45 mph . How long did the trip there take if the return trip took three hours?
4) Mary made a trip to the lake and back. The trip there took three hours and the trip back took two hours. She averaged $30 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.
6) Shawna left the hardware store three hours before James. They drove in opposite directions. James drove at 55 mph for two hours. After this time they were 360 mi . apart. Find Shawna's speed.
8) Mark left the science museum and traveled toward the lake. Adam left one hour later traveling at $25 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to Mark. After traveling for four hours Adam finally caught up. Find Mark's average speed.
10) A cargo plane left Paris and flew toward Dublin at an average speed of 220 mph . A passenger plane left some time later flying in the opposite direction with an average speed of 410 mph . After the cargo plane had flown for 12 hours the planes were 6740 mi . apart. Find the number of hours the passenger plane flew.
11) A diesel train left Miami and traveled north. Three hours later a freight train left traveling at 80 mph in an effort to catch up to the diesel train. After traveling for two hours the freight train finally caught up. Find the diesel train's average speed.
12) A container ship left the Azores and traveled north at an average speed of 16 mph . A cruise ship left some time later traveling in the same direction at an average speed of 20 mph . After traveling for eight hours the cruise ship caught up with the container ship. Find the number of hours the container ship traveled before the cruise ship caught up.
14) Kayla left the airport and traveled toward the ferry office at an average speed of 20 $\mathrm{km} / \mathrm{h}$. Some time later Rob left traveling in the same direction but at an average speed of $50 \mathrm{~km} / \mathrm{h}$. After traveling for two hours Rob caught up with Kayla. How long did Kayla travel before Rob caught up?
16) Dan made a trip to the lake and back. The trip there took three hours and the trip back took five hours. What was Dan's average speed on the trip there if he averaged 30 $\mathrm{km} / \mathrm{h}$ on the return trip?
18) A container ship left Hawaii and traveled toward Guam at an average speed of 9 mph . Some time later an aircraft carrier left traveling in the same direction but at an average speed of 13 mph . After traveling for nine hours the aircraft carrier caught up with the container ship. Find the number of hours the container ship traveled before the aircraft carrier caught up.
20) Imani drove to the lake and back. The trip there took three hours and the trip back took five hours. She averaged 39 mph on the return trip. Find the average speed of the trip there.
22) Stefan left the airport one hour before Anjali. They drove in opposite directions. Anjali drove at $55 \mathrm{~km} / \mathrm{h}$ for three hours. After this time they were 445 km apart. Find Stefan's speed.
13) A passenger plane left New York and flew south. Three hours later a jet left flying at 240 mph in an effort to catch up to the passenger plane. After flying for six hours the jet finally caught up. What was the passenger plane's average speed?
15) Stephanie made a trip to the recycling plant and back. On the trip there she traveled 36 $\mathrm{km} / \mathrm{h}$ and on the return trip she went 45 $\mathrm{km} / \mathrm{h}$. How long did the trip there take if the return trip took four hours?
17) A cruise ship traveled to dry dock and back. The trip there took three hours and the trip back took seven hours. What was the cruise ship's average speed on the trip there if it averaged $12 \mathrm{~km} / \mathrm{h}$ on the return trip?
19) DeShawn drove to the recycling plant and back. On the trip there he drove 24 mph and on the return trip he went 30 mph . How long did the trip there take if the return trip took four hours?
21) Molly made a trip to her friend's house and back. The trip there took two hours and the trip back took five hours. What was Molly's average speed on the trip there if she averaged 28 mph on the return trip?
23) A passenger plane left New York and flew toward the airshow at an average speed of $280 \mathrm{~km} / \mathrm{h}$. Some time later a jet left flying in the opposite direction with an average speed of $300 \mathrm{~km} / \mathrm{h}$. After the passenger plane had flown for 12 hours the planes were 5460 km apart. Find the number of hours the jet flew.
24) A container ship left the Azores at the same time as an aircraft carrier. The ships traveled in opposite directions. The aircraft carrier traveled at a speed of $25 \mathrm{~km} / \mathrm{h}$. After seven hours they were 280 km apart. How fast did the container ship travel?

## Answers to Assignment (ID: 9)

| 1) 50 mph | 2) 5 hours | 3) 3 hours | 4) $20 \mathrm{~km} / \mathrm{h}$ |
| :--- | :--- | :--- | :--- |
| 5) 60 mph | 6) 50 mph | 7) 3 hours | 8) $20 \mathrm{~km} / \mathrm{h}$ |
| 9) $25 \mathrm{~km} / \mathrm{h}$ | 10) 10 hours | 11) 32 mph | 12) 10 hours |
| 13) 160 mph | 14) 5 hours | 15) 5 hours | 16) $50 \mathrm{~km} / \mathrm{h}$ |
| 17) $28 \mathrm{~km} / \mathrm{h}$ | 18) 13 hours | 19) 5 hours | 20) 65 mph |
| 21) 70 mph | 22) $70 \mathrm{~km} / \mathrm{h}$ | 23) 7 hours | 24) $15 \mathrm{~km} / \mathrm{h}$ |

## Assignment

1) A cruise ship left Diego Garcia four hours before a container ship. The vessels traveled in opposite directions. The container ship traveled at $11 \mathrm{~km} / \mathrm{h}$ for seven hours. After this time the vessels were 165 km apart. Find the cruise ship's speed.
2) John left James' house and traveled toward the capital at an average speed of 30 mph . Some time later DeShawn left traveling in the opposite direction with an average speed of 45 mph . After John had traveled for three hours they were 225 mi . apart. How long did DeShawn travel?
3) An Air Force plane left Nairobi at the same time as a cargo plane. The planes flew in opposite directions. The cargo plane flew at a speed of 465 mph . After five hours they were 4300 mi . apart. How fast did the Air Force plane fly?
4) A container ship left Port 41 and traveled toward Tahiti at an average speed of 12 $\mathrm{km} / \mathrm{h}$. Some time later an aircraft carrier left traveling in the same direction but at an average speed of $20 \mathrm{~km} / \mathrm{h}$. After traveling for three hours the aircraft carrier caught up with the container ship. Find the number of hours the container ship traveled before the aircraft carrier caught up.
5) Adam drove to the town hall and back. The trip there took six hours and the trip back took five hours. He averaged $54 \mathrm{~km} / \mathrm{h}$ on the return trip. Find the average speed of the trip there.

Date $\qquad$ Period
2) A diesel train left Seoul and traveled toward the repair yards at an average speed of 30 mph . A cattle train left some time later traveling in the opposite direction with an average speed of 75 mph . After the diesel train had traveled for 19 hours the trains were 645 mi . apart. Find the number of hours the cattle train traveled.
4) Jimmy left the mall and drove toward the lake at an average speed of 40 mph . Imani left some time later driving in the opposite direction with an average speed of 40 mph . After Jimmy had driven for five hours they were 280 mi . apart. How long did Imani drive?
6) A passenger train left Abuja and traveled west at an average speed of $30 \mathrm{~km} / \mathrm{h}$. Some time later a freight train left traveling in the same direction but at an average speed of 70 $\mathrm{km} / \mathrm{h}$. After traveling for three hours the freight train caught up with the passenger train. Find the number of hours the passenger train traveled before the freight train caught up.
8) A submarine left the Dania Pier and traveled south. Six hours later a cruise ship left traveling at $25 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the submarine. After traveling for four hours the cruise ship finally caught up. Find the submarine's average speed.
10) James left home and traveled toward the desert. Stephanie left one hour later traveling at 45 mph in an effort to catch up to James. After traveling for two hours Stephanie finally caught up. Find James' average speed.
11) Mei left the movie theater and traveled south at an average speed of 32 mph . Chelsea left some time later traveling in the same direction at an average speed of 40 mph . After traveling for four hours Chelsea caught up with Mei. Find the number of hours Mei traveled before Chelsea caught up.
13) A jet made a trip to Jakarta and back. The trip there took ten hours and the trip back took six hours. What was the jet's average speed on the trip there if it averaged 380 $\mathrm{km} / \mathrm{h}$ on the return trip?
15) Natalie traveled to her friend's house and back. On the trip there she traveled $48 \mathrm{~km} / \mathrm{h}$ and on the return trip she went $72 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took two hours?
17) Nicole left home at the same time as Maria. They traveled in opposite directions. Maria traveled at a speed of 42 mph . After five hours they were 370 mi . apart. How fast did Nicole travel?
19) A jet flew to the maintenance facility and back. On the trip there it flew 249 mph and on the return trip it went 415 mph . How long did the trip there take if the return trip took six hours?
21) An aircraft carrier left Diego Garcia one hour before a container ship. The ships traveled in opposite directions. The container ship traveled at $14 \mathrm{~km} / \mathrm{h}$ for 12 hours. After this time the ships were 376 km apart. Find the aircraft carrier's speed.
12) Jose left the hospital and drove toward the mountains. One hour later Kayla left driving at 75 mph in an effort to catch up to Jose. After driving for two hours Kayla finally caught up. Find Jose's average speed.
14) Eugene made a trip to the lake and back. The trip there took two hours and the trip back took five hours. What was Eugene's average speed on the trip there if he averaged $20 \mathrm{~km} / \mathrm{h}$ on the return trip?
16) Amanda traveled to the ferry office and back. On the trip there she traveled $75 \mathrm{~km} / \mathrm{h}$ and on the return trip she went $60 \mathrm{~km} / \mathrm{h}$. How long did the trip there take if the return trip took five hours?
18) A submarine left the Azores and traveled south at an average speed of 17 mph . A cruise ship left some time later traveling in the opposite direction with an average speed of 19 mph . After the submarine had traveled for 12 hours the vessels were 242 mi . apart. Find the number of hours the cruise ship traveled.
20) A passenger train left Berlin and traveled south at an average speed of 32 mph . Some time later a cattle train left traveling in the opposite direction with an average speed of 74 mph . After the passenger train had traveled for 18 hours the trains were 724 mi . apart. How long did the cattle train travel?
22) Darryl left school at the same time as Adam. They drove in opposite directions. Adam drove at a speed of $80 \mathrm{~km} / \mathrm{h}$. After six hours they were 720 km apart. How fast did Darryl drive?
23) Aliyah left Molly's house and drove toward her friend's house at an average speed of 70 $\mathrm{km} / \mathrm{h}$. Shawna left some time later driving in the opposite direction with an average speed of $35 \mathrm{~km} / \mathrm{h}$. After Aliyah had driven for four hours they were 315 km apart. How long did Shawna drive?
24) A passenger train left Bangalore and traveled south. A cattle train left six hours later traveling at $35 \mathrm{~km} / \mathrm{h}$ in an effort to catch up to the passenger train. After traveling for eight hours the cattle train finally caught up. Find the passenger train's average speed.

## Answers to Assignment (ID: 10)

| 1) $8 \mathrm{~km} / \mathrm{h}$ | 2) 1 hour | 3) 3 hours | 4) 2 hours |
| :--- | :--- | :--- | :--- |
| 5) 395 mph | 6) 7 hours | 7) 5 hours | 8) $10 \mathrm{~km} / \mathrm{h}$ |
| 9) $45 \mathrm{~km} / \mathrm{h}$ | 10) 30 mph | 11) 5 hours | 12) 50 mph |
| 13) $228 \mathrm{~km} / \mathrm{h}$ | 14) $50 \mathrm{~km} / \mathrm{h}$ | 15) 3 hours | 16) 4 hours |
| 17) 32 mph | 18) 2 hours | 19) 10 hours | 20) 2 hours |
| 21) $16 \mathrm{~km} / \mathrm{h}$ | 22) $40 \mathrm{~km} / \mathrm{h}$ | 23) 1 hour | 24) $20 \mathrm{~km} / \mathrm{h}$ |

3) 3 hours
4) 2 hours
5) $10 \mathrm{~km} / \mathrm{h}$
6) 50 mph
7) 4 hours
8) 2 hours
9) $20 \mathrm{~km} / \mathrm{h}$
