

## Homework #5 - Uniform Motion Problems

Date \_\_\_\_\_ 5T \_\_\_\_\_

- 1) Abhasra left the movie theater and traveled toward the lake at an average speed of 42 km/h. Sometime later Mike left traveling in the opposite direction with an average speed of 71 km/h. After Abhasra had traveled for three hours they were 339 km apart. Find the number of hours Mike traveled.
- 2) A passenger plane flew to the maintenance facility and back. The trip there took seven hours and the trip back took ten hours. What was the passenger plane's average speed on the trip there if it averaged 210 km/h on the return trip?
- 3) Darryl left home and drove west at an average speed of 32 km/h. Carlos left sometime later driving in the same direction at an average speed of 48 km/h. After driving for two hours Carlos caught up with Darryl. How long did Darryl drive before Carlos caught up?
- 4) A jet and a passenger plane left Paris at the same time. The planes flew in opposite directions. The passenger plane flew 6 mph faster than the jet. After three hours they were 1698 mi. apart. Find the jet's speed.

- 5) A passenger plane made a trip to Las Vegas and back. On the trip there it flew 333 km/h and on the return trip it went 299.7 km/h. How long did the trip there take if the return trip took 12 hours?
- 6) A diesel train left Washington and traveled north. 0.9 hours later a freight train left traveling at 50 km/h in an effort to catch up to the diesel train. After traveling for 11.6 hours the freight train finally caught up. Find the diesel train's average speed.
- 7) A cattle train traveled to the outer-most station and back. On the trip there it traveled 70 mph and on the return trip it went 83 mph. How long did the trip there take if the return trip took 14 hours?
- 8) Julio left Julia's house 3.4 hours before Joe. They traveled in opposite directions. Joe traveled at 68.8 mph for 2.5 hours. After this time they were 413.9 mi. apart. Find Julio's speed.