

Name: _____

Date: _____

Algebra I

Directions: Solve each word problem. Include a let statement, chart, and work to solve. Write your answer as a sentence.

1. Two trains leave Sillyville station at 10am. One train is traveling east at 80 mph and the other is traveling west at 95 mph. At what time will the two trains be 525 miles apart?

2. Tom leaves his house and runs to the beach at a rate of 5mph. An hour later, Jerry leaves their house and rides his bike to the same beach at a rate of 10 mph. How long will it take Jerry to catch up to Tom?

3. Mikayla drives to New York City at a rate of 40mph. She drives home at a rate of 60 mph. If the total trip takes her 5 hours, how long does it take her each way? How far does she live from New York City?

4. Two trains are 581 miles apart, heading towards each other. One train is traveling at 78 mph while the other is traveling at a rate of 88 mph. How long until the two trains meet?

5. Two cars are 360 miles apart. One car is traveling 10mph faster than the other. If they leave at 11am and pass each other at 3pm, how fast was each car traveling?

6. Two planes leave an airport at the same time heading in the same direction. One plane is traveling at 350 mph and the other is traveling at 400mph. How long will it take for the difference between the two planes to be 75 miles?