

GroupWork 2.8

6-25-12

Group Members \_\_\_\_\_

NOTE: Some of these exercises are borrowed or adapted from Beginning Algebra by Elayn Martin-Gay.

1. A bus traveled on a level road for 3 hours at an average speed 20 miles per hour faster than it traveled on a winding road. The time spent on the winding road was 4 hours. Find the average speed of the bus on (1) the level road and (2) the winding road if the entire trip was 305 miles.

Level Road 55mph

Winding Road 35mph

2. Kathleen and Cade leave simultaneously from the same point hiking in opposite directions; Kathleen is walking at 4 miles per hour and Cade at 5 miles per hour. How long can they talk on their walkie-talkies if the walkie-talkies have a 20 mile range?

0.45 hour = 27 minutes

3. Two hikers are 11 miles apart and walking toward each other. They meet in 2 hours. Find the rate of each hiker if one hiker walks 1 mile per hour faster than the other.

2.25mph, 3.35mph

4. On a 250 mile trip Gary traveled at an average speed of 70mph, got a speeding ticket, and then travelled at 60mph for the remainder of the trip. If the entire trip took 4.5 hours and the speeding ticket stop took 30 minutes, how long did Gary speed before getting stopped?

1 hour