Equation application worksheet

Name:

Instructions: Solve these applied problems. Work in groups!

1. Linnea's car currently has 10 quarts of fluid in the radiator, 25% of which is antifreeze. She wants to drain some of the fluid and replace it pure antifreeze so that the resulting mix will be 40% antifreeze. How much should she drain?

2. Sarah drives from Corvallis to Portland, and back. It is about 80 miles each way. On the way to Portland, she drives about 10 mph faster than she drove going the other direction. If the total trip takes 3.6 hours, how fast was she going each direction?

3. Two people leave from a party at Willamette and 11th at the same time exactly. One bikes exactly south along Willamette while another runs exactly east along 11th at .5 m/s slower. After 20 seconds, they are 50 m apart. How fast are they going?