Name _____

Linear Equation Word Problems

1. Emily is investing in two different mutual funds. Fund A has an annual return rate of 8%, while Fund B has an annual return rate of 12%. If Emily invests $5000 more in Fund B than Fund A, and her total annual return is $820, how much did she invest in each fund?

2. A shipping company charges a base rate of $50 plus $2 per mile for deliveries within the city. For deliveries outside the city, they charge a base rate of $80 plus $3 per mile. If a delivery costs $110 and is 15 miles outside the city, how many miles is it to deliver within the city?

3. Jacob is mixing two types of coffee beans to create a blend. Coffee bean type A costs $6 per pound, while type B costs $9 per pound. If Jacob wants to create a 20-pound blend costing $7.50 per pound, how many pounds of each type should he use?

4. A car rental company charges $40 per day plus $0.25 per mile for a standard car. For a luxury car, they charge $100 per day plus $0.50 per mile. If a customer rents a car for 5 days and drives 300 miles, which car type would be cheaper for them?

5. A cell phone plan offers unlimited talk time for $40 per month plus $0.05 per minute. Another plan offers a base rate of $20 per month plus $0.10 per minute. If both plans cost the same for 200 minutes of talk time, how much do additional minutes cost for each plan?

6. A construction company is building a rectangular swimming pool. The cost of the pool's base is $5000, and each foot of fencing costs $30. If the total cost is $15,000, and the length is twice the width, what are the dimensions of the pool?

7. Claire is saving for a vacation. She puts $1000 in a savings account with a 4% annual interest rate and $1500 in another account with a 6% annual interest rate. If she earns $108 in interest after a year, how much did she put in each account?

8. A bakery sells cakes for $30 each and cupcakes for $2 each. If they sell a total of 50 items in a day and make $1000 in revenue, how many cakes and cupcakes did they sell?

9. Alex and Bailey are participating in a charity run. Alex can run at a speed of 8 mph, while Bailey can run at 6 mph. If they start at the same time and run towards a finish line 24 miles away, how long will it take for Alex to catch up with Bailey?

10. A company sells two types of laptops. Type A costs $800 each, and Type B costs $1200 each. If the company sells a total of 30 laptops for $30,000, how many of each type did they sell?