6.24A Word problems involving systems of equations          Name_____
Math Lab                                                    Period_____

Write a system of equations for each word problem and solve the system by any method you wish.

1)  Andy's Cab Service charges a $6 fee plus $0.50 per mile.  His twin brother Randy starts a rival business where he charges $0.80 per mile but does not charge a fee.  For what distances should a customer use Andy's Cab Services?  For what distances should a customer use Randy's Cab Services?

2)  Find two numbers such that the sum of the first and three times the second is 5 and the sum of the second and two times the first is 8.

3)  A store sells Brazilian coffee for $10 per pound and Columbian coffee for $14 per pound.  The store decides that it wants to mix these two types of coffee into 150-pound bags which sell for $1650.  How many pounds of each kind of coffee should they use?

4)  Pam has two part-time jobs.  At one job, she works as a cashier and makes $11.50 per hour.  At the second job, she works as a tutor and makes $23.50 per hour.  One week she worked 30 hours and made $429.  How many hours did she spend at each job?