Algebra 1: 6.2 HW **Name** _____ **Period** _____
Linear Combinations/Elimination Method

Solve each system of equations using linear combinations/elimination.

1. $\begin{cases} 3x+5y=8 \\ 2x-5y=22 \end{cases}$

2. $\begin{cases} 4x-y=2 \\ 2x+2y=26 \end{cases}$

3. $\begin{cases} 3x+5y=8 \\ 2x-5y=22 \end{cases}$

4. $\begin{cases} 2x-4y=4 \\ -3x+10y=14 \end{cases}$

5. $\begin{cases} 5x-5y=10 \\ 6x-6y=12 \end{cases}$

6. $\begin{cases} \frac{3}{4}x+\frac{1}{2}y=-\frac{3}{4} \\ \frac{2}{3}x+\frac{2}{3}y=\frac{2}{3} \end{cases}$

Write a system of equations to represent each problem situation. Then, solve using the linear combinations/elimination.

7. The high school marching band is selling fruit baskets. A large basket containing 10 apples and 15 oranges sells for $20. A small basket containing 5 apples and 6 oranges sells for $8.50. **How much does each apple and each orange sell for?**

8. Asna works on a shipping dock at a tire manufacturing plant. She loads one pallet with 4 Mudslinger tires and 6 Roadripper tires that weighs 212 pounds. She loads a second pallet with 7 Mudslinger tires and 2 Roadripper tires weighing 184 pounds. **How much does each Mudslinger tire and each Roadripper tire weigh?**

9. The Pizza Barn sells one customer 3 large pepperoni pizzas and 2 orders of breadsticks for $30. They sell another customer 4 large pepperoni pizzas and 3 orders of breadsticks for $41. **How much does each pepperoni pizza and each order of breadsticks cost?**