# 8.1 Practice Problems

Solve the following systems by elimination.

1. $\begin{cases} 2x+y=7 \\ 3x-y=-2 \end{cases}$

2. $\begin{cases} 2x+3y=-9 \\ 4x-y=17 \end{cases}$

3. $\begin{cases} 2x+3y=8 \\ 3x+4y=-5 \end{cases}$

4. $\begin{cases} 6x-y=-15 \\ 4x+5y=7 \end{cases}$

5. $\begin{cases} 3x-2y=8 \\ -6x+4y=-16 \end{cases}$

6. $\begin{cases} 4x-y=5 \\ 2y-8x=7 \end{cases}$

7. $\begin{cases} x+2y \quad\;\;=5 \\ \quad\;-3y+5z=9 \\ 4x \quad\;\;\;\;-z=1 \end{cases}$

8. $\begin{cases} x+2y-3z=-16 \\ 2x-4y+z=20 \\ 3x+5y-2z=-17 \end{cases}$

9.  A restaurant manager wants to purchase 300 sets of dishes.  One design costs $20 per set, while another costs $45 per set.  If she wants to use her entire budget of $11,000, how many of each design should be ordered?