Solve the system of linear equations by elimination. Check your answer and state the type of system.

1) $\begin{cases} -4x - 2y = -12 \\ 4x + 8y = -24 \end{cases}$

2) $\begin{cases} x - y = 11 \\ 2x + y = 19 \end{cases}$

Type:

Check:

Type:

Check:

3) $\begin{cases} -4x + 5y = 1 \\ -4x + 5y = -10 \end{cases}$

4) $\begin{cases} -6x + 6y = 6 \\ -6x + 3y = -12 \end{cases}$

Type:

Check:

Type:

Check:

5) $\begin{cases} 7x + 2y = 24 \\ 8x + 2y = 30 \end{cases}$

Type:

Check:

6) $\begin{cases} -6x + 8y = 6 \\ -3x + 4y = 3 \end{cases}$

Type:

Check:

7) $\begin{cases} -3x + 7y = -16 \\ -9x + 5y = 16 \end{cases}$

Type:

Check:

8) $\begin{cases} -7x + y = -19 \\ -2x + 3y = -19 \end{cases}$

Type:

Check:

9) The difference of two numbers is 3. Their sum is 13. Find the numbers.

10) The school that Jake goes to is selling tickets to the choral performance.
   On the first day of ticket sales the school sold 3 student tickets and 1
   adult ticket for a total of $38. On the second day the school took in $66
   by selling 3 student tickets and 3 adult tickets. Find the price of a
   student ticket and the price of an adult ticket.

   a) Identify your variables.

   b) Write the system of equations that can be used to represent this
       situation.

   c) Find the price of a student ticket and the price of an adult ticket.