

## Assignment 6.3 – Solving Systems

Solve the system of equations using the elimination method. Check your solutions.

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

2. 
$$\begin{cases} -5x - 6y = -50 \\ x - 6y = -26 \end{cases}$$

3. 
$$\begin{cases} 5x - 2y = 4 \\ 3x + y = 9 \end{cases}$$

4. 
$$\begin{cases} 3x - 5y = 13 \\ x - 2y = 5 \end{cases}$$

5. 
$$\begin{cases} 7x + 2y = -1 \\ 3x - 4y = 19 \end{cases}$$

6. 
$$\begin{cases} 3x - 5y = 7 \\ 5x - 2y = -1 \end{cases}$$

7. Karla is selling tickets to a school fundraiser.  
 Day 1: She sells 3 senior citizen tickets and 1 child ticket for \$38 total.  
 Day 2: She sells 3 senior citizen tickets and 2 child tickets for \$52 total.

Find the price of a senior citizen ticket and a child ticket.

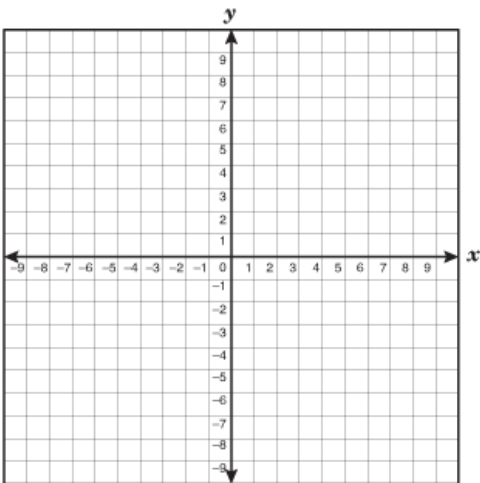
- Write two different linear equations that model the above situation.
- Solve the system of linear equations using the elimination method.

Refresh your memory

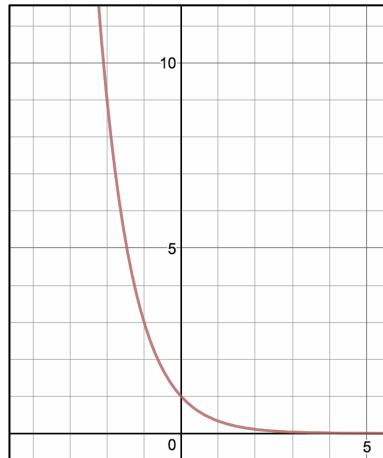
Find the exponential equations from two consecutive points (lesson 2.4).

8.

Graph:  $y = 2(3)^x$



9.



Type: \_\_\_\_\_ y-intercept:

Common ratio:

Equation: