

Review 6.1-6.6

For numbers 1-3, solve each system THREE TIMES!!

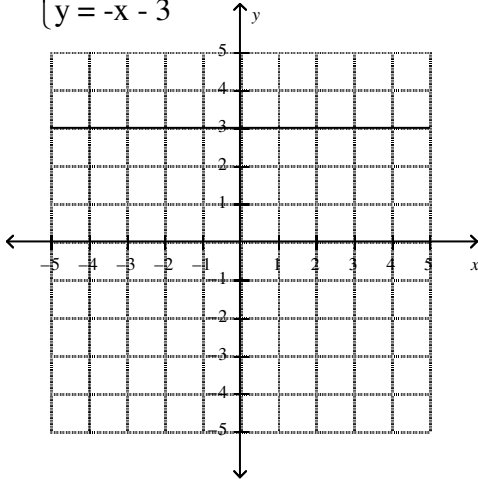
A) by Graphing B) by Substitution C) by Elimination/Combinations

Then explain which method you think is the most "user friendly" for each system.

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

B.

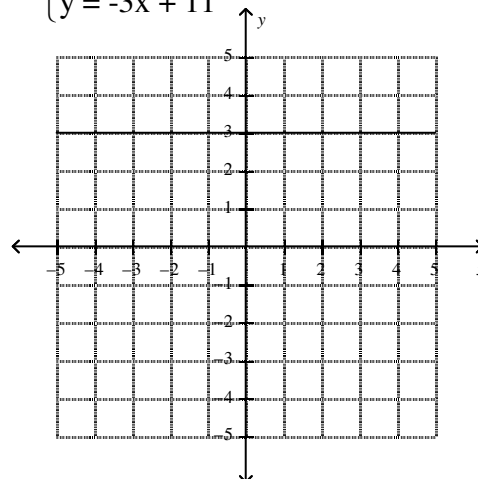
C.



2.A
$$\begin{cases} 3x + 2y = 7 \\ y = -3x + 11 \end{cases}$$

B.

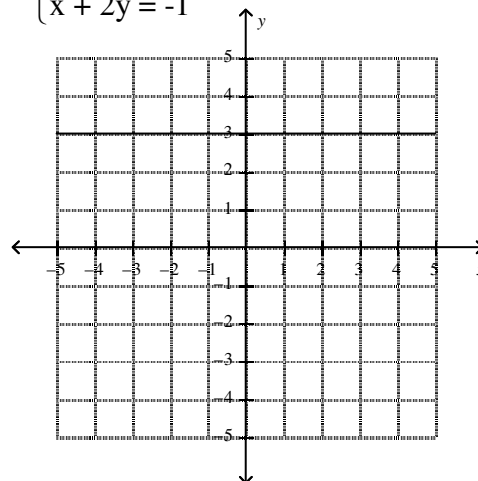
C.



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

B.

C.



For numbers 4-6, solve each system using whichever method you think would be the most "user friendly".

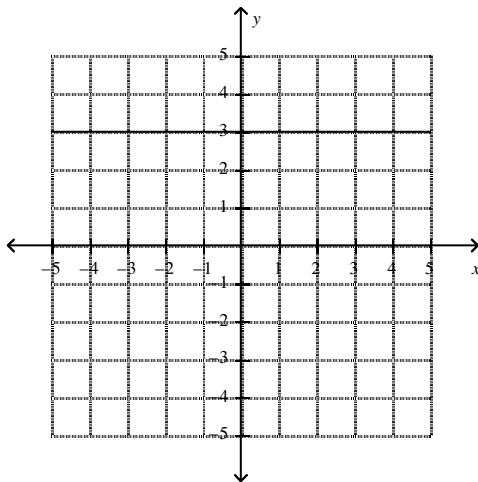
4.
$$\begin{cases} 3x + y = 28 \\ 3x + y = 14 \end{cases}$$

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

6.
$$\begin{cases} 3x - 4y = -24 \\ x + y = -1 \end{cases}$$

7. What kind of lines are represented by the system in problem #4?
8. What kind of lines are represented by the system in problem #5?
9. What kind of lines are represented by the system in problem #6?
10. Tickets to a concert are \$5 for balcony seats and \$10 for orchestra seats. If 600 people attended the concert and \$4,750 was collected, how many people bought balcony seats and how many people bought orchestra seats?

Graph
$$\begin{cases} x + y < -3 \\ 6x + 5y > 30 \end{cases}$$



Graph
$$\begin{cases} 2x - y < 1 \\ y \geq -1 \end{cases}$$

