

Station 1: Solving Inequalities

Practice Problems: Solve each inequality and graph your solution on a number line.

1. $-12 \geq 24x$



2. $8a - 15 > 73$



3. $-18 - 5y \geq 52$



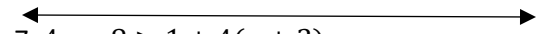
4. $4(x + 3) \leq 44$



5. $4(n - 2) - 6 > 18$



6. $3 + 5x < 5(x + 1)$



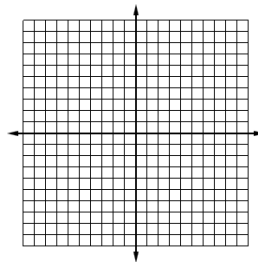
7. $4x - 8 > 1 + 4(x + 3)$



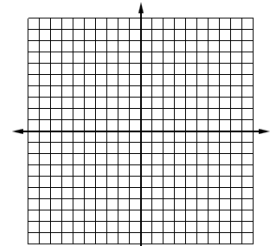
Station 2: Graphing Linear Equations

Practice Problems: Graph each of the following linear equations.

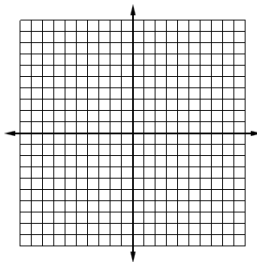
1. $y = \frac{7}{2}x - 2$



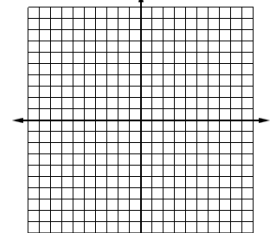
4. $7x + y = 5$



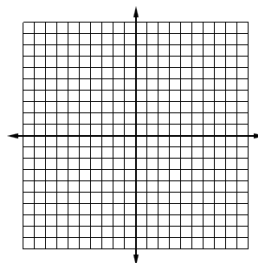
2. $y = -5$



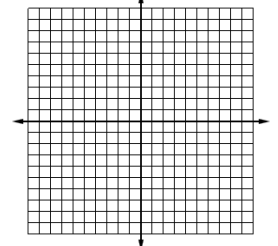
5. $3x + 5y = -5$



3. $x = 2$



6. $3x - 5y = 15$



Station 3: Finding Key Features on a Calculator.

Practice: Let $f(x) = -x^2 + 4x - 5$ $g(x) = -x - 1$

$h(x) = \frac{2}{3}x - 1$

1. Find the maximum of $f(x)$.

3. Find the intersection between $f(x)$ and $g(x)$

2. Find the x-intercept of $h(x)$.

4. Find the y-intercept of $f(x)$.

Station 4: Solving a System of Equations by Elimination

Practice Problems: Solve each of the following systems of equations using elimination. Check your solutions

1.
$$\begin{aligned} -4x - 2y &= -12 \\ 4x + 8y &= -24 \end{aligned}$$

3.
$$\begin{aligned} 8x + y &= -16 \\ -3x + y &= -5 \end{aligned}$$

2.
$$\begin{aligned} -2x - 9y &= -25 \\ -4x - 9y &= -23 \end{aligned}$$

4.
$$\begin{aligned} 5x + y &= 9 \\ 10x - 7y &= -18 \end{aligned}$$

Station 5: Solving Systems of equations by Substitution

Practice Problems: Solve each of the following systems of equations by substitution. Check your solutions.

1.
$$\begin{aligned} x + y &= 3 \\ 2x - y &= 0 \end{aligned}$$

3.
$$\begin{aligned} x - 3y &= -14 \\ x - y &= -2 \end{aligned}$$

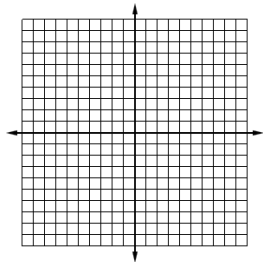
2.
$$\begin{aligned} 2x - 2y &= 10 \\ x - y &= 5 \end{aligned}$$

4.
$$\begin{aligned} 3x - 4y &= 8 \\ 2x + y &= 9 \end{aligned}$$

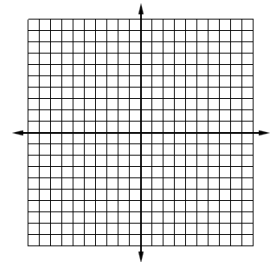
Station 6: Solving Systems of Equations by Graphing

Practice Problems: Solve the following by graphing. Check your solutions.

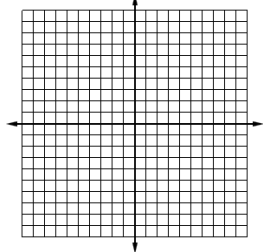
1.
$$\begin{aligned} 2x &= 3 - y \\ y &= 4x - 12 \end{aligned}$$



3.
$$\begin{aligned} 6y &= 2x - 14 \\ x - 7 &= 3y \end{aligned}$$



2.
$$\begin{aligned} 3y &= -6x - 3 \\ y &= 2x - 1 \end{aligned}$$



4.
$$\begin{aligned} 2x &= 2 - 9y \\ 21y &= 4 - 6x \end{aligned}$$

