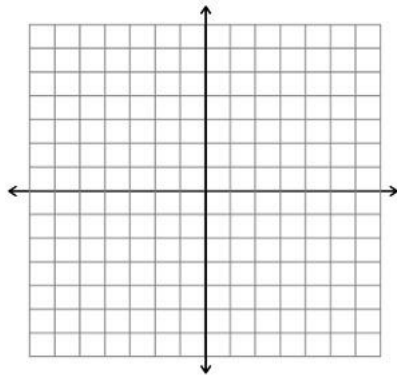


Review Lessons 3.3 & 3.4 Worksheet

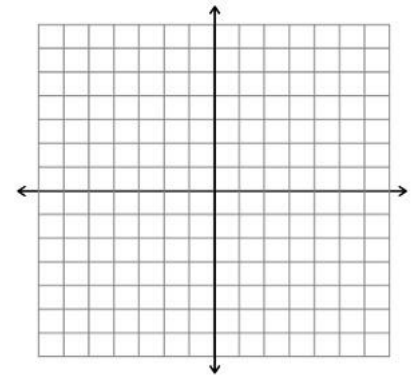
Name: _____

Graph the system of inequalities.

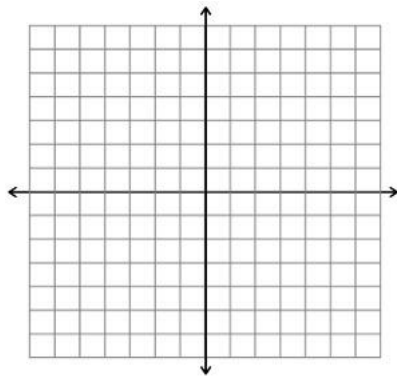
1.) $x + y \geq 0$
 $-x + y \geq 0$



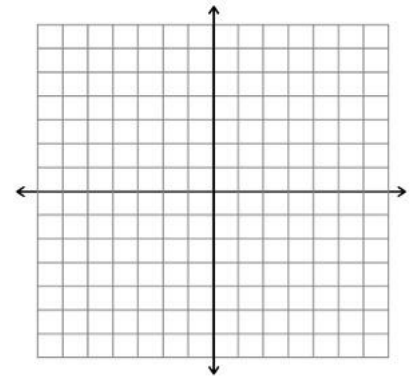
2.) $2x + y < 5$
 $y > 2|x - 1|$



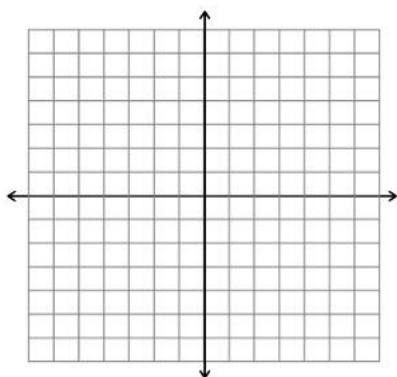
3.) $y > 2x - 3$
 $x > -1$
 $y < 3$



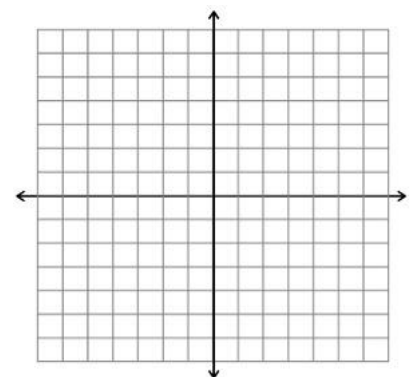
4.) $y < \frac{1}{2}x + 3$
 $y \geq -2x - 3$
 $x \leq 3$



5.) $y \leq -\frac{1}{3}x + 2$
 $y > 3x - 3$
 $x > -1$



6.) $y \leq |x| + 4$
 $x < 2$
 $y \geq 2$



Solve the system using any algebraic method.

7.) $x - 2y + 4z = -19$

$$2x + y - 3z = 14$$

$$3x + y + 2z = 5$$

solution: _____

8.) $x - 2y - 3z = -7$

$$4x + 5y - 2z = -7$$

$$-2x + y + z = -7$$

solution: _____

9.) $x + 5y - 2z = -1$

$$-x - 2y + z = 6$$

$$-2x - 7y + 3z = 7$$

solution: _____

$$\begin{aligned} 10.) \quad & 6x + y - z = -2 \\ & x + 6y + 3z = 23 \\ & -x + y + 2z = 5 \end{aligned}$$

solution: _____

$$\begin{aligned} 11.) \quad & 4x - 8y + 2z = 10 \\ & -3x + y - 2z = 6 \\ & 2x - 4y + z = 8 \end{aligned}$$

solution: _____

$$\begin{aligned} 12.) \quad & -x + 5y - z = -16 \\ & 2x + 3y + 4z = 18 \\ & x + y - z = -8 \end{aligned}$$

solution: _____

13.) Mukwonago was the big winner at last year's Classic 8 Conference track meet with the help of 20 individual-event place winners earning a combined 68 team points (in other words, MHS had 20 people place either 1st, 2nd, or 3rd and scored a total of 68 total team points). A 1st place finish earns 5 team points, a 2nd place finish earns 3 team points, and a 3rd place finish earns 1 team point. MHS had a strong 2nd place showing, with as many 2nd place finishers as 1st and 3rd place finishers combined. Exactly how many athletes finished in 1st place? 2nd place? 3rd place?

14.) You and two friends buy snacks for a field trip. You spend a total of \$8, Jeff spends \$9, and Curtis spends \$9. The table shows the amounts of mixed nuts, granola, and dried fruit that each person purchased.

What is the price per pound of each type of snack?

	Mixed nuts	Granola	Dried fruit
You	1 lb	0.5 lb	1 lb
Jeff	2 lb	0.5 lb	0.5 lb
Curtis	1 lb	2 lb	0.5 lb