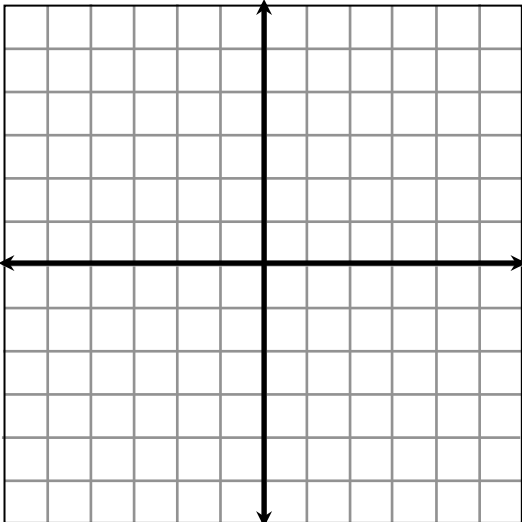
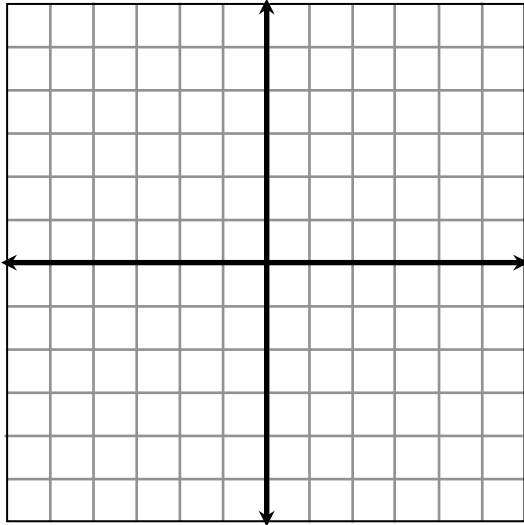


<p>1. State the x-intercept and y-intercept of each</p> <p>(a) $6x - 4y = 12$</p> <p>x-intercept: (,)</p> <p>y-intercept: (,)</p> <p>(b) $\frac{5}{3}x - 5y = \frac{5}{3}$</p> <p>$x$-intercept: (,)</p> <p>y-intercept: (,)</p>	<p>2. Graph $x - 2y = 6$</p> <p>x-intercept: (,)</p> <p>y-intercept: (,)</p> 
<p>3. Find the slope and y-intercept of</p> <p>(a) $y = 5x - 1$</p> <p>(b) $y = 10$</p>	<p>4. Find the slope and y-intercept of</p> <p>(a) $y = -x$</p> <p>(b) $-2x + 3y = 9$</p>

<p>5. Write the equation in slope-intercept form ($y = mx + b$) of a line that has slope 1 and passes through $(-3, 4)$</p>	<p>6. Determine the equation in slope-intercept form ($y = mx + b$) of the line through $(-3, -5)$ and $(6, -2)$</p>
<p>7. Determine the equation in slope-intercept form ($y = mx + b$) of the line through $(3, -3)$ that is perpendicular to $y = -3x + 3$</p>	<p>8. Determine the equation in slope-intercept form ($y = mx + b$) of the line through $(6, 5)$ that is parallel to $2x - 3y = 6$</p>

9. Solve the system by graphing
and state the solution category.

$$\begin{aligned}x + y &= 4 \\2x - y &= 2\end{aligned}$$

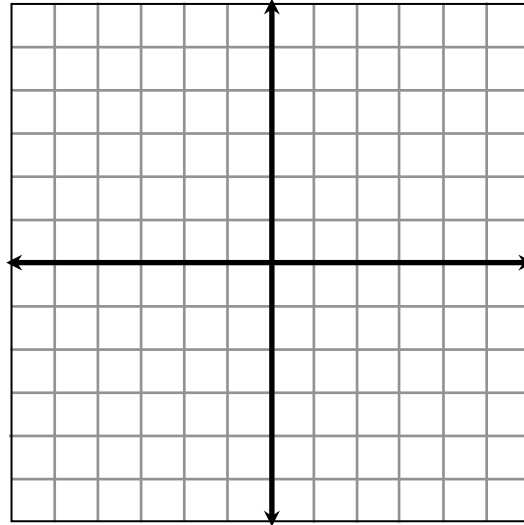


System solution:

Solution category:

10. Solve the system
by graphing
and state the solution category.

$$\begin{aligned}4x + y &= -2 \\ \frac{1}{4}y &= -x - \frac{1}{2}\end{aligned}$$



System solution:

Solution category:

11. Solve the system by substitution
and state the solution category.

$$\begin{aligned}x &= 2y - 3 \\5x - 4y &= 9\end{aligned}$$

System solution:

Solution category:

12. Solve the system by substitution
and state the solution category.

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

System solution:

Solution category:

<p>13. Solve the system by elimination and state the solution category.</p> $x + y = -4$ $x - y = 8$	<p>14. Solve the system by elimination and state the solution category.</p> $2x - 3y = 16$ $2x - 5y = 24$
<p>System solution:</p> <p>Solution category:</p>	<p>System solution:</p> <p>Solution category:</p>
<p>15. Solve the system by elimination and state the solution category.</p> $5x + y = 12$ $2x - 2y = 0$	<p>16. Solve the system by elimination and state the solution category.</p> $6x + 5y = 4$ $-4x + 2y = 8$
<p>System solution:</p> <p>Solution category:</p>	<p>System solution:</p> <p>Solution category:</p>

17. A landscape designer invested a total of \$6000, some at 4% and the rest at 2%. He earned \$162 in interest after one year. How much did he invest at each rate?

	4%	2%	Total
Amount invested			
Interest earned			

Equations:

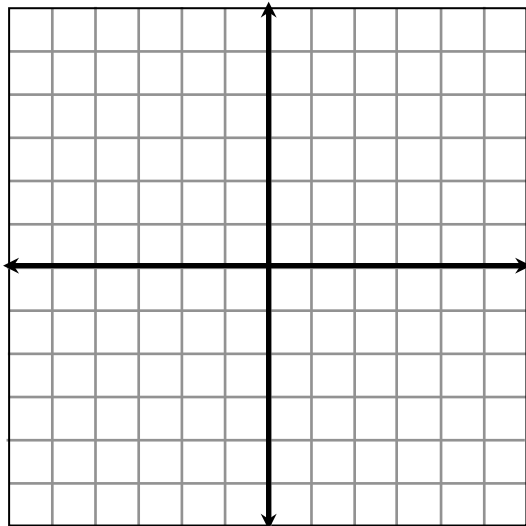
The amount invested at 4% is _____.

The amount invested at 2% was _____.

19. Solve the system by graphing.

$$y \leq 0$$

$$y \geq x - 3$$



18. How many pounds each of cookie dough containing 15% chocolate chips and dough containing 30% chocolate chips must be mixed to obtain 100 pounds of cookie dough containing 18% chocolate chips?

	15%	30%	18%
Pounds of dough			
Pounds of chocolate chips			

Equations:

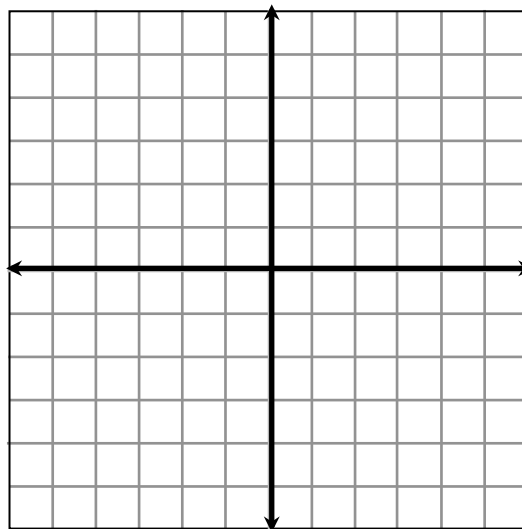
The no. of lbs. of 15% mixture is _____.

The no. of lbs. of 30% mixture is _____.

20. Solve the system by graphing.

$$y < -\frac{1}{4}x + 3$$

$$x - y < 1$$

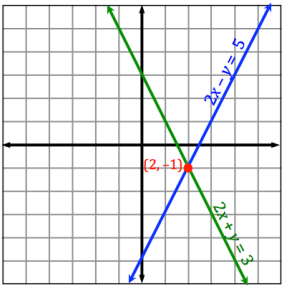
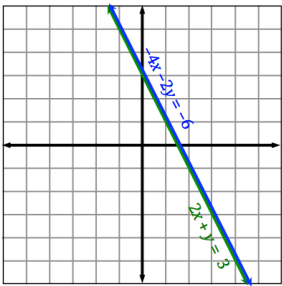
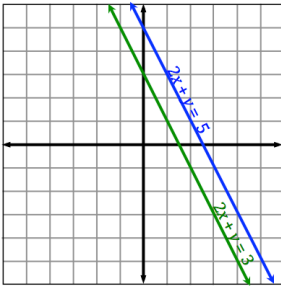


For Reference

Rules for Fractions For any real numbers, $a, b, c,$ and $d, b \neq 0, c \neq 0,$ and $d \neq 0$

$$\frac{a}{c} + \frac{b}{c} = \frac{a+b}{c} \qquad \frac{a}{c} - \frac{b}{c} = \frac{a-b}{c} \qquad \frac{a}{b} \cdot \frac{c}{d} = \frac{ac}{bd} \qquad \frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \cdot \frac{d}{c} = \frac{ad}{bc}$$

Properties of Equality	Properties of Inequality			
For any real numbers, $a, b, c,$ If $a = b,$ then $a + c = b + c$ and $ac = bc$	For any real numbers, $a, b,$ and $c > 0$		For any real numbers, $a, b,$ and $c < 0$	
	If $a < b,$ then $a + c < b + c$ and $ac < bc$	If $a > b,$ then $a + c > b + c$ and $ac > bc$	If $a > b,$ then $a + c > b + c$ and $ac < bc$	If $a < b,$ then $a + c < b + c$ and $ac > bc$

Consistent systems		Inconsistent system
Independent equations	Dependent equations	
		
<i>The two lines intersect in a single point.</i>	<i>The equations describe the same line.</i>	<i>The lines are parallel.</i>
System solution set: $\{(2, -1)\}$	System solution set: $\{(x, y) \mid 2x + y = 3\}$	System solution set: \emptyset