

Create a table of values and graph the lines

Date _____

Find the PoI

~~Solve the system~~ by graphing. Remember to label properly

$$1) \begin{cases} x + 2y = -2 \\ 7x + 4y = 16 \end{cases}$$

$$7x + 4y = 16$$

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

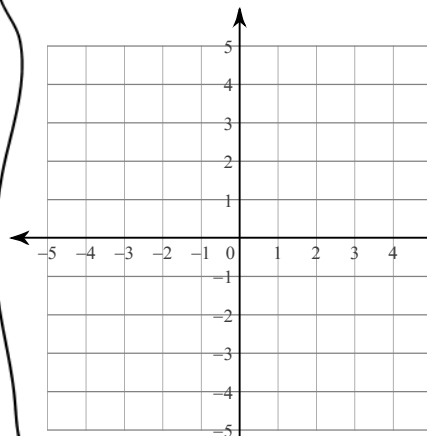
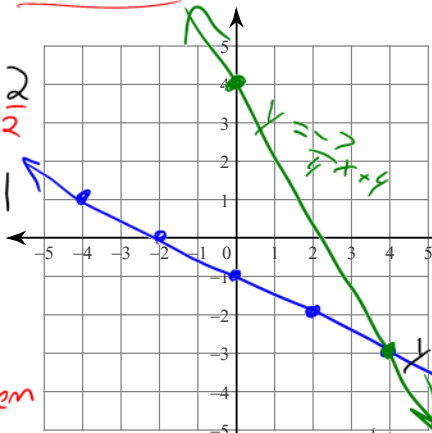
$$2y = \frac{-x}{2} - \frac{2}{2}$$

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

$$4y = \frac{-7x}{4} + \frac{16}{4}$$

$$y = -\frac{7}{4}x + 4$$

$$\therefore \text{PoI is } (4, -3)$$



$$\begin{aligned} (-8, 18) & A \\ (8, -10) & B \end{aligned}$$

x	y	(x, y)
-4	$-\frac{1}{2}(-4) - 1 = 1$	(-4, 1)
-2	$-\frac{1}{2}(-2) - 1 = 0$	(-2, 0) A
0	$-\frac{1}{2}(0) - 1 = -1$	(0, -1)
2	$-\frac{1}{2}(2) - 1 = -2$	(2, -2)
4	$-\frac{1}{2}(4) - 1 = -3$	(4, -3) B

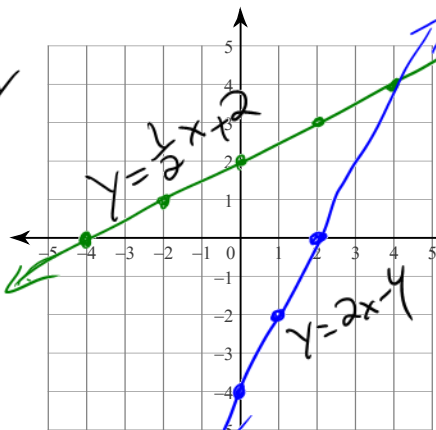
x	y
-8	$-\frac{7}{4}(-8) + 4 = 18$
-4	$-\frac{7}{4}(-4) + 4 = 11$
0	$-\frac{7}{4}(0) + 4 = 4$
4	$-\frac{7}{4}(4) + 4 = -3$
8	$-\frac{7}{4}(8) + 4 = -10$

x-intercept - the coordinate which touches the x-axis
 $(-2, 0)$
 y-intercept - the coordinate on the y-axis
 $(0, -1)$

$$3) \begin{cases} 2x - y = 4 \\ x - 2y = -4 \end{cases}$$

$$4) \begin{cases} 2x - 3y = 12 \\ 2x + y = 4 \end{cases}$$

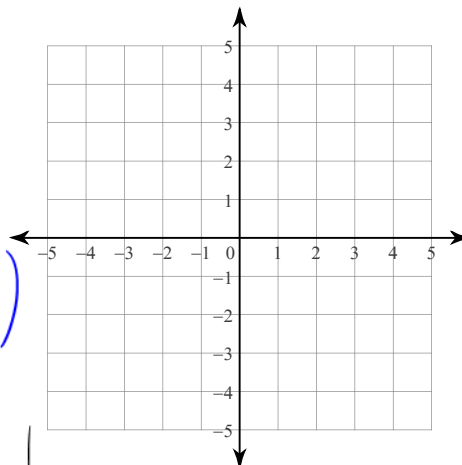
$$2x - 4 = y$$



$$x + 4 = 2y$$

$$\frac{1}{2}x + 2 = y$$

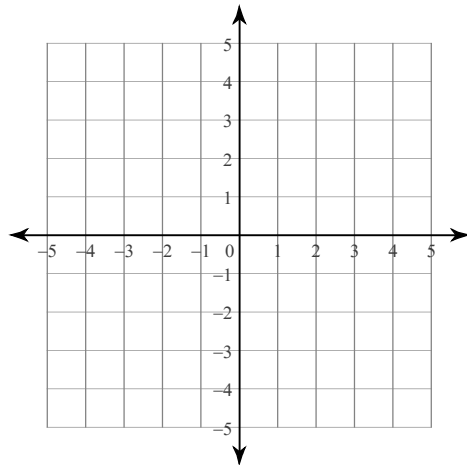
$$\therefore \text{PoI is } (4, 4)$$



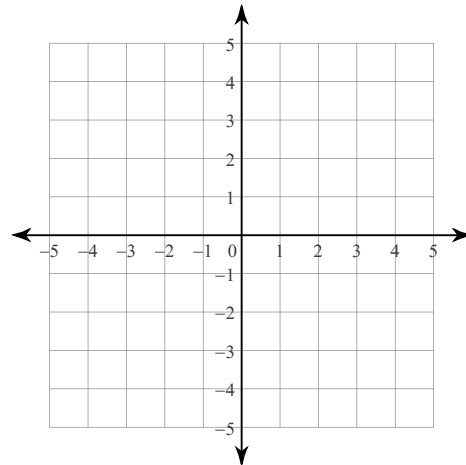
x	y	(x, y)
-2	$2(-2) - 4 = -8$	(-2, -8)
-1	$2(-1) - 4 = -6$	(-1, -6)
0	$2(0) - 4 = -4$	(0, -4)
1	$2(1) - 4 = -2$	(1, -2)
2	$2(2) - 4 = 0$	(2, 0)

x	y	(x, y)
-4	$\frac{1}{2}(-4) + 2 = 0$	(-4, 0)
-2	$\frac{1}{2}(-2) + 2 = 1$	(-2, 1)
0	$\frac{1}{2}(0) + 2 = 2$	(0, 2)
2	$\frac{1}{2}(2) + 2 = 3$	(2, 3)
4	$\frac{1}{2}(4) + 2 = 4$	(4, 4)

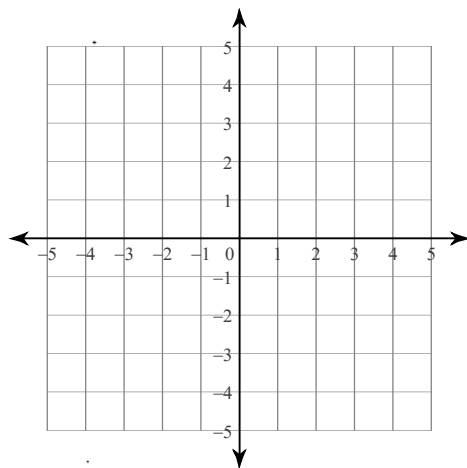
5) $x + y = -3$
 $x - 4y = -8$



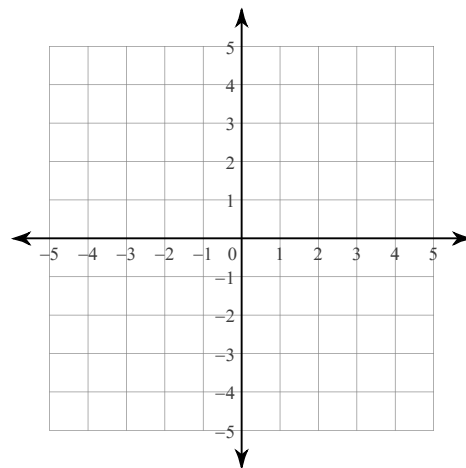
6) $2x + y = 2$
 $2x + y = 1$



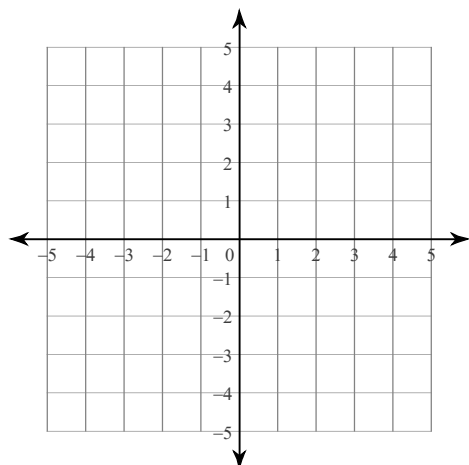
7) $x - y = 3$
 $x - y = 2$



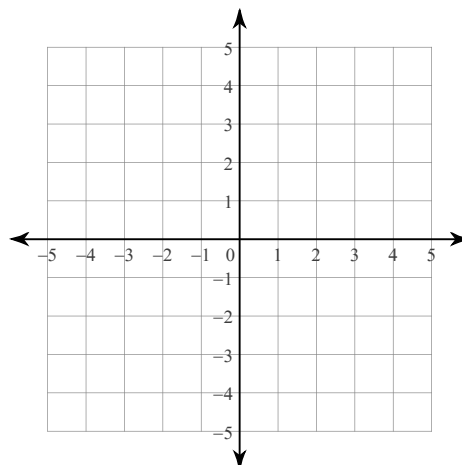
8) $x + 2y = 8$
 $3x - 4y = 4$



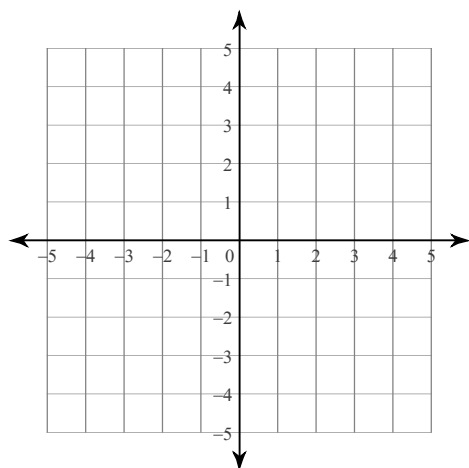
9) $x - y = 3$
 $5x - y = -1$



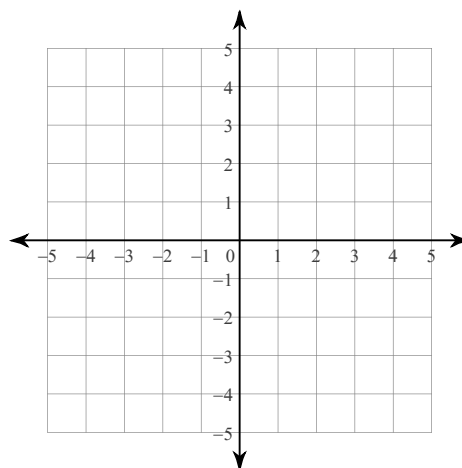
10) $2x - y = 3$
 $x + y = 3$



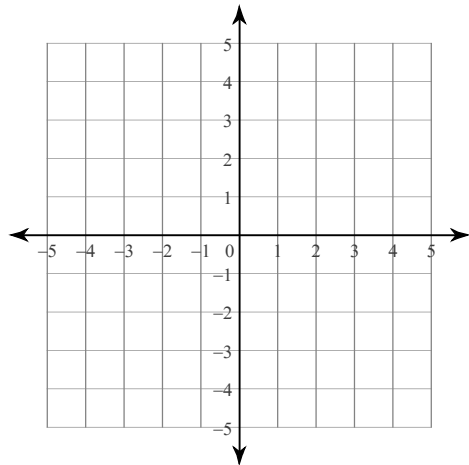
11) $x - 4y = -8$
 $7x - 4y = 16$



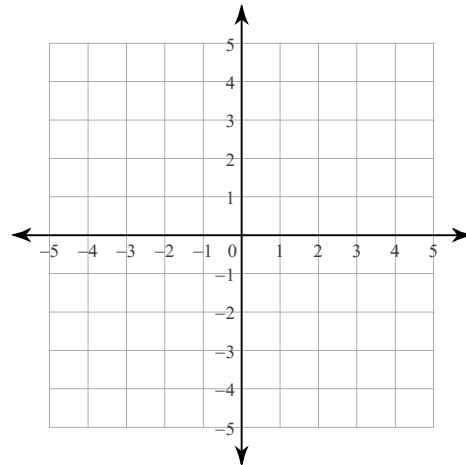
12) $3x - y = -3$
 $x - 2y = 4$



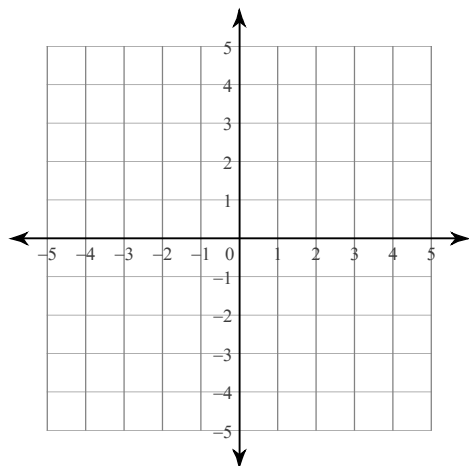
13) $7x - 3y = 9$
 $x - 3y = -9$



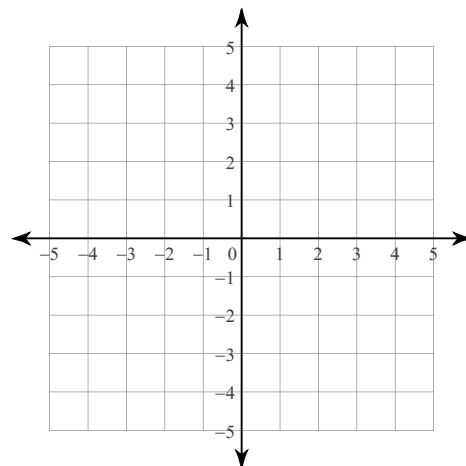
14) $y = 1$
 $2x + 3y = -3$



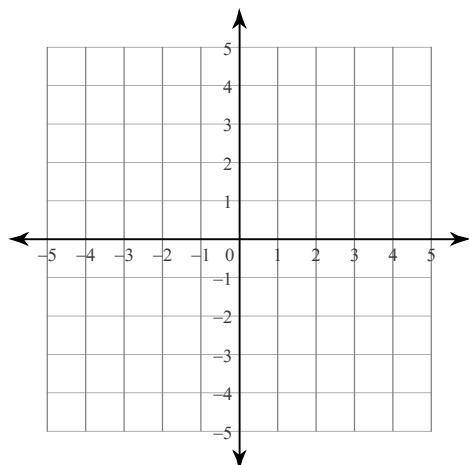
15) $y = 1$
 $x + y = -2$



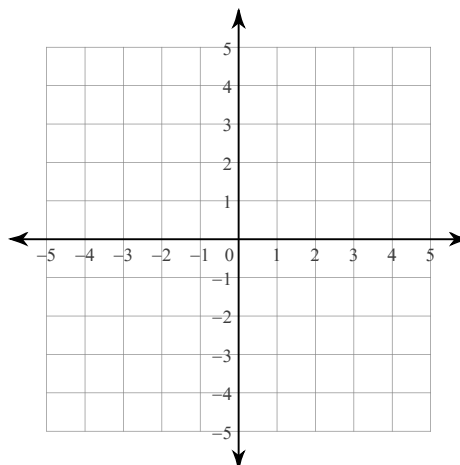
16) $x + 3y = -9$
 $x - 3y = 3$



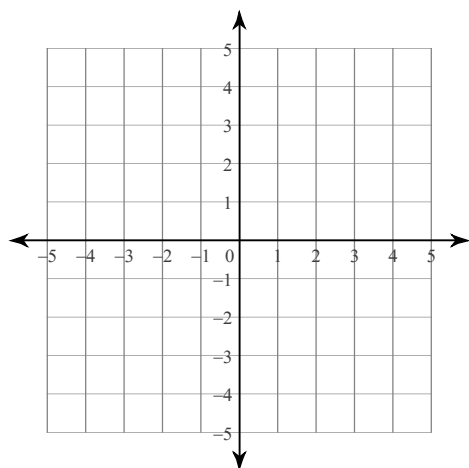
17) $3x + 2y = -2$
 $3x + 2y = 8$



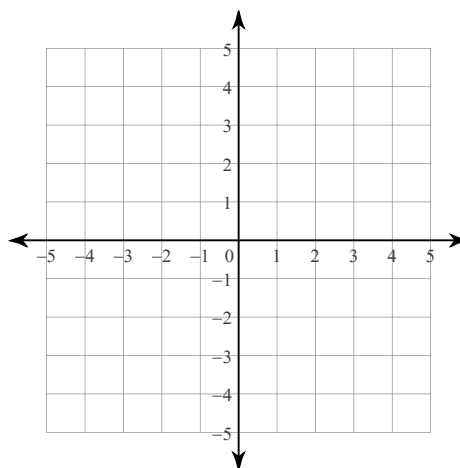
18) $5x - 4y = -16$
 $x + 4y = -8$



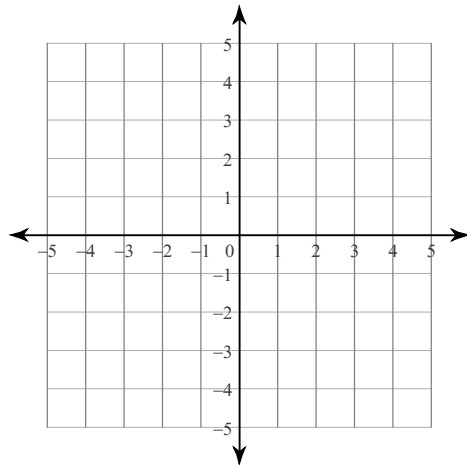
19) $4x + y = -2$
 $x - y = -3$



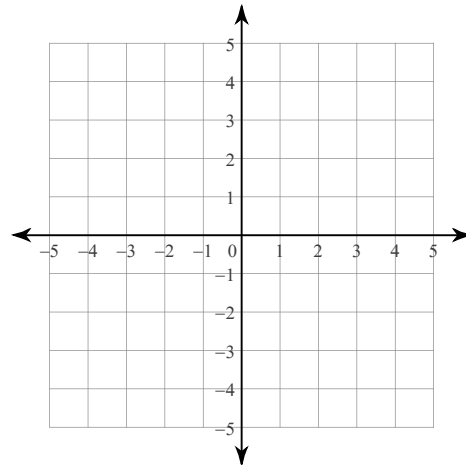
20) $x - y = 3$
 $x - y = -1$



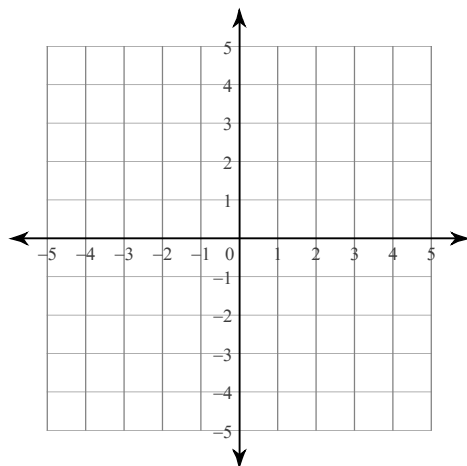
21) $x + y = -3$
 $5x + y = 1$



22) $x - 2y = -8$
 $x + 2y = 4$



23) $5x + y = 2$
 $y = -3$



24) $3x + y = -2$
 $y = 4$

