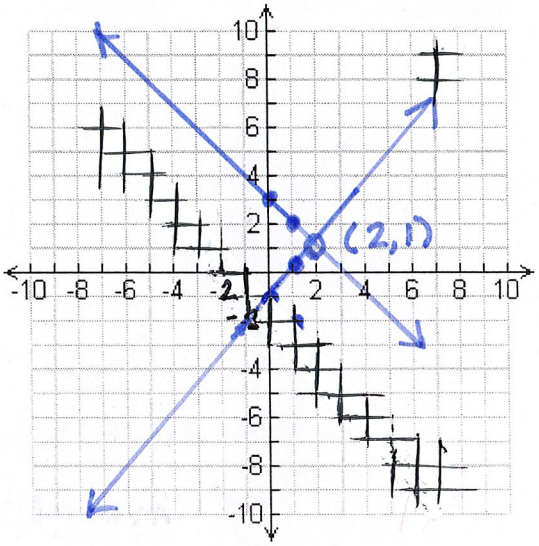
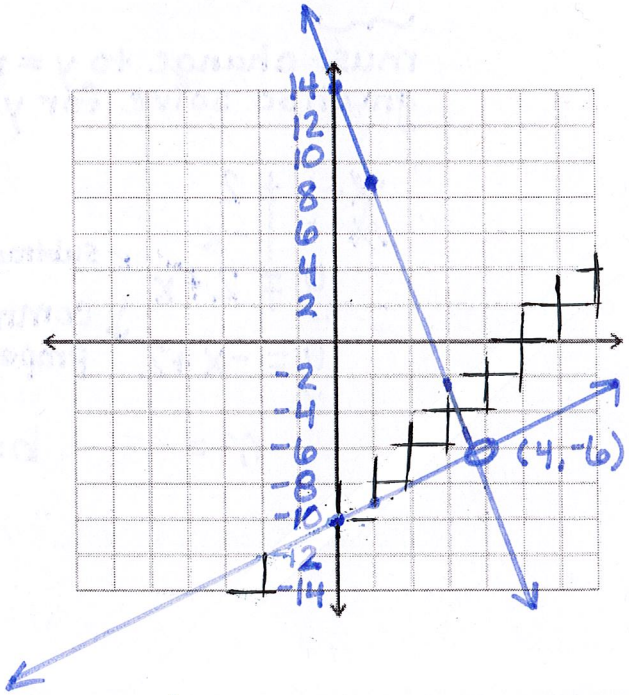
# Try It 5-1

**Ex. 1:** Solve the system by graphing.

1. $y = x - 1$ m = 1 b = -1
   $y = -x + 3$ m = -1 b = 3

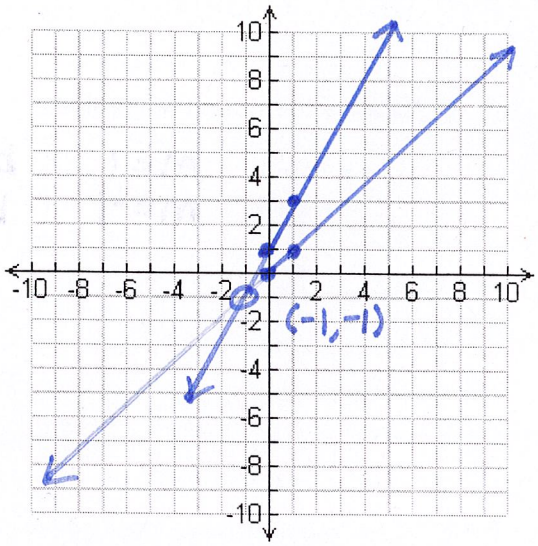



2. $y = -5x + 14$ m = -5 b = 14
   $y = x - 10$ m = 1 b = -10



3. $y = x$ $m=1$ $b=0$

$y = 2x + 1$ $m=2$ $b=1$




**Ex. 2:** Solve the System by graphing.

4. $y = -4x - 7$ $m=-4$ $b=-7$

$x + y = 2$

must change to $y = mx+b$ to graph, so solve for $y$

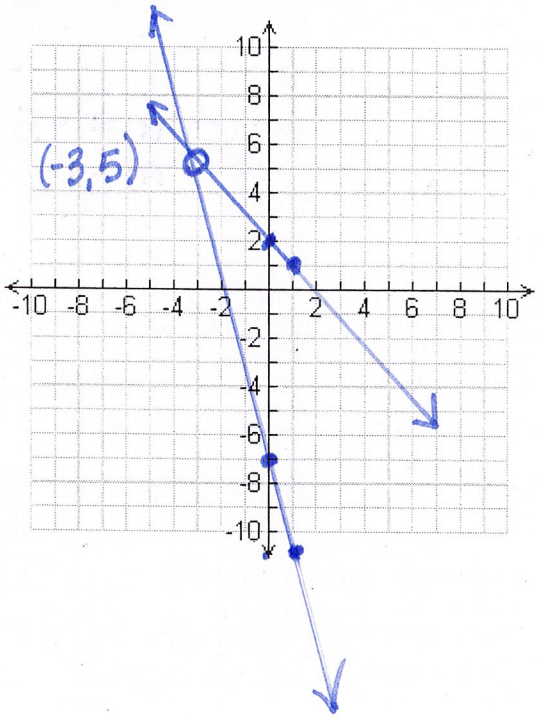
$x + y = 2$

$-x \quad -x$

$y = 2 - x$ ← subtraction (add the opposite)

$y = -x + 2$ ↓ commutative property of addition

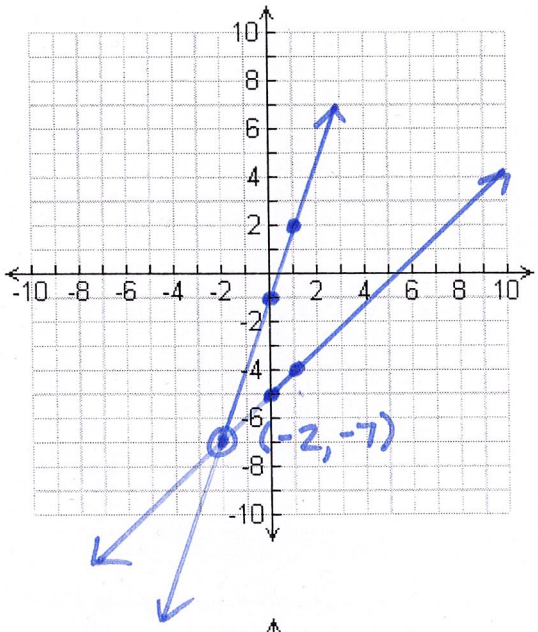
$m=-1$ $b=2$



5. $x - y = 5$
$-3x + y = -1$

$x - y = 5$
$-x \quad -x$
$-y = 5 - x$
$\frac{-y}{-1} = \frac{5-x}{-1}$
$y = \frac{5}{-1} - \frac{x}{-1}$
$y = -5 + x$
$y = x - 5$
$m = 1 \quad b = -5$

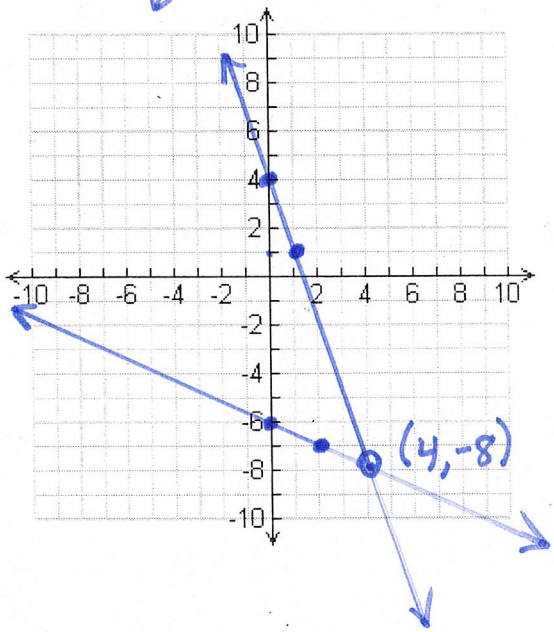
$-3x + y = -1$
$+3x \quad +3x$
$y = -1 + 3x$
$y = 3x - 1$
$m = 3 \quad b = -1$




6. $\frac{1}{2}x + y = -6$
$6x + 2y = 8$

$\frac{1}{2}x + y = -6$
$-\frac{1}{2}x \quad -\frac{1}{2}x$
$y = -6 - \frac{1}{2}x$
$y = -\frac{1}{2}x - 6$
$m = -\frac{1}{2} \quad b = -6$

$6x + 2y = 8$
$-6x \quad -6x$
$\frac{2y}{2} = \frac{8-6x}{2}$
$y = \frac{8}{2} - \frac{6}{2}x$
$y = 4 - 3x$
$y = -3x + 4$
$m = -3 \quad b = 4$




**Ex. 3:**

7. A kicker makes a total of 6 extra points and field goals in a game. He scores 12 points total. How many extra points did the kicker make?

$x$ = field goals
$y$ = extra points

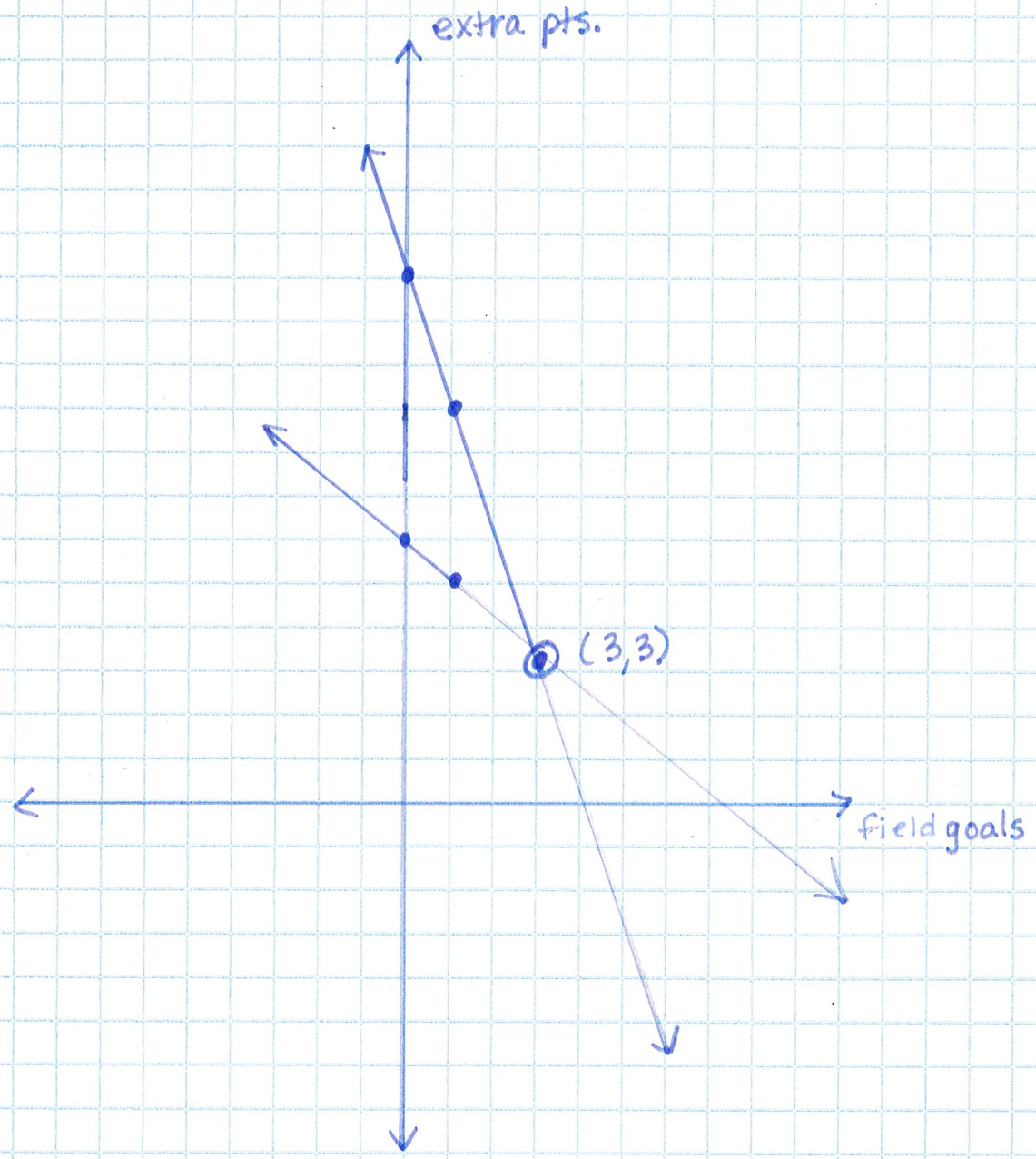
$x + y = 6$
$3x + y = 12$

1 pt for extra pts. & 3 pts. for field goal

$x + y = 6$
$-x \quad -x$
$y = 6 - x$
$y = -x + 6$
$m = -1 \quad b = 6$

$3x + y = 12$
$-3x \quad -3x$
$y = 12 - 3x$
$y = -3x + 12$
$m = -3 \quad b = 12$

3 extra pts.


extra pts.
(3,3)
field goals