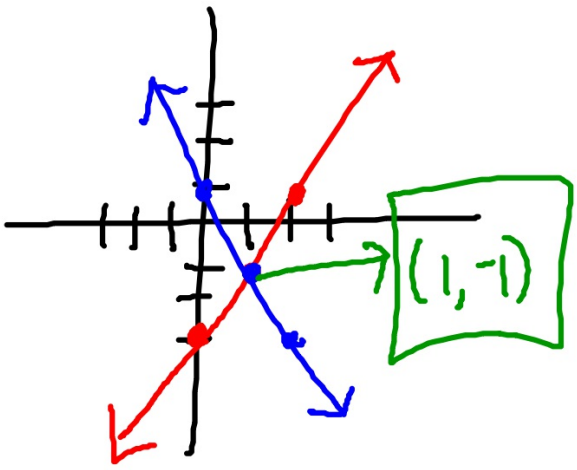
pg 443 # 1, 2, 7, 8, 13, 14, 21-23, 25, 26, 31

① $y = 2x - 3 \rightarrow m = \frac{2}{1}, b = -3$

$-y = 2x - 1$

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



(2)

$6x + 2y = 16$

$-2x + y = -2$

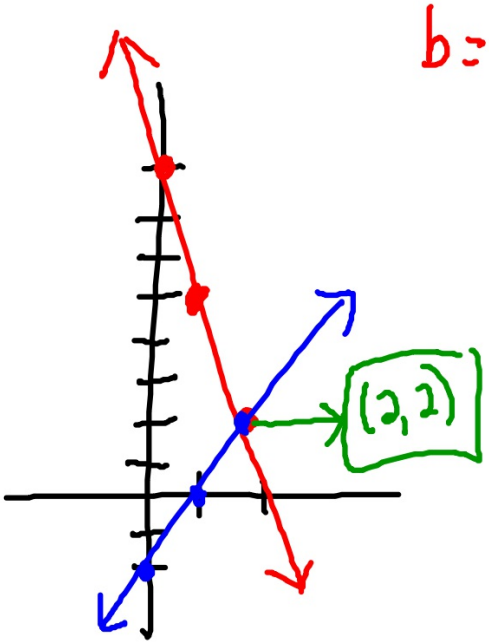
$\frac{2y}{2} = \frac{-6x}{2} + \frac{16}{2}$

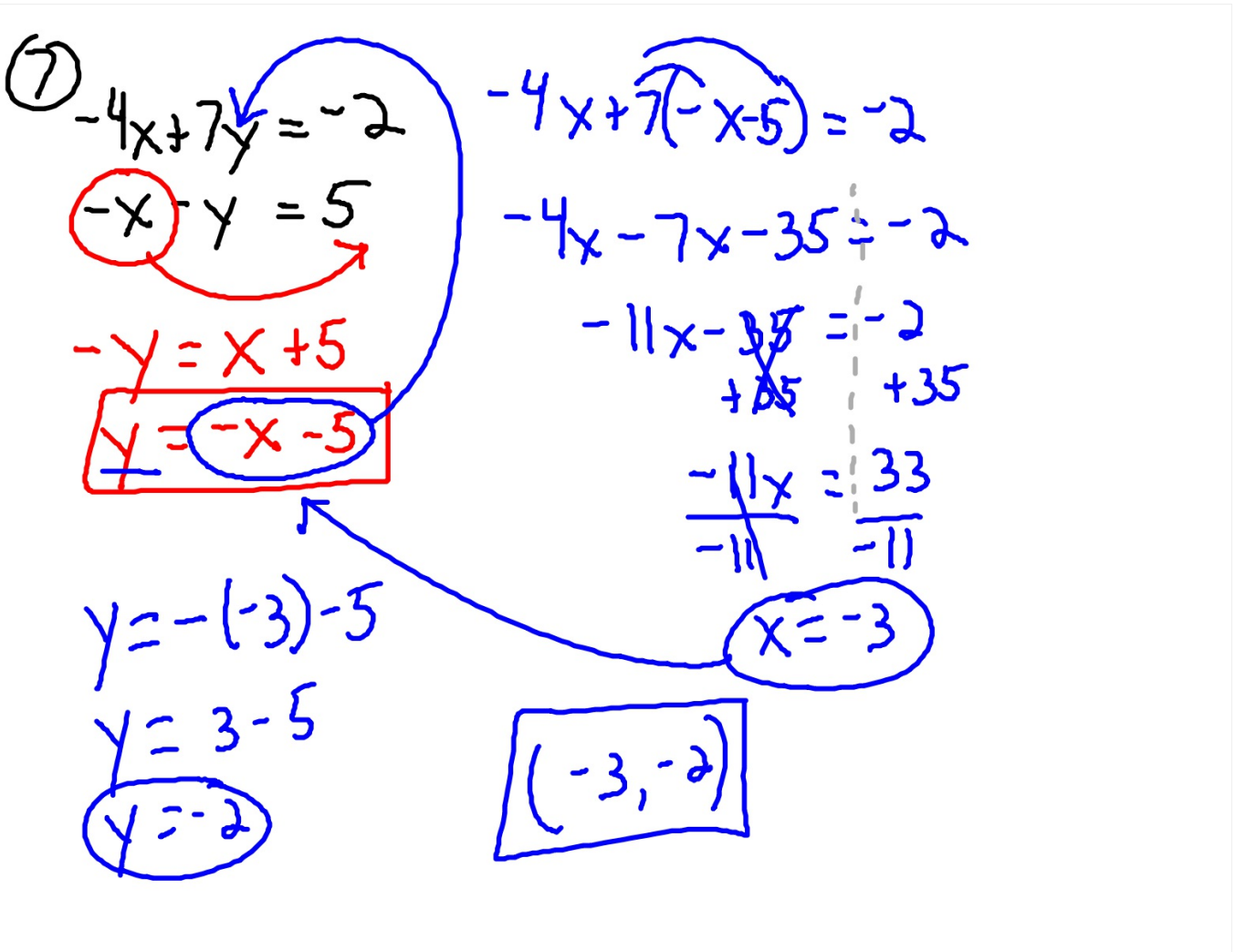
$y = -3x + 8$ $\quad m = -\frac{3}{1}$ $\quad b = 8$

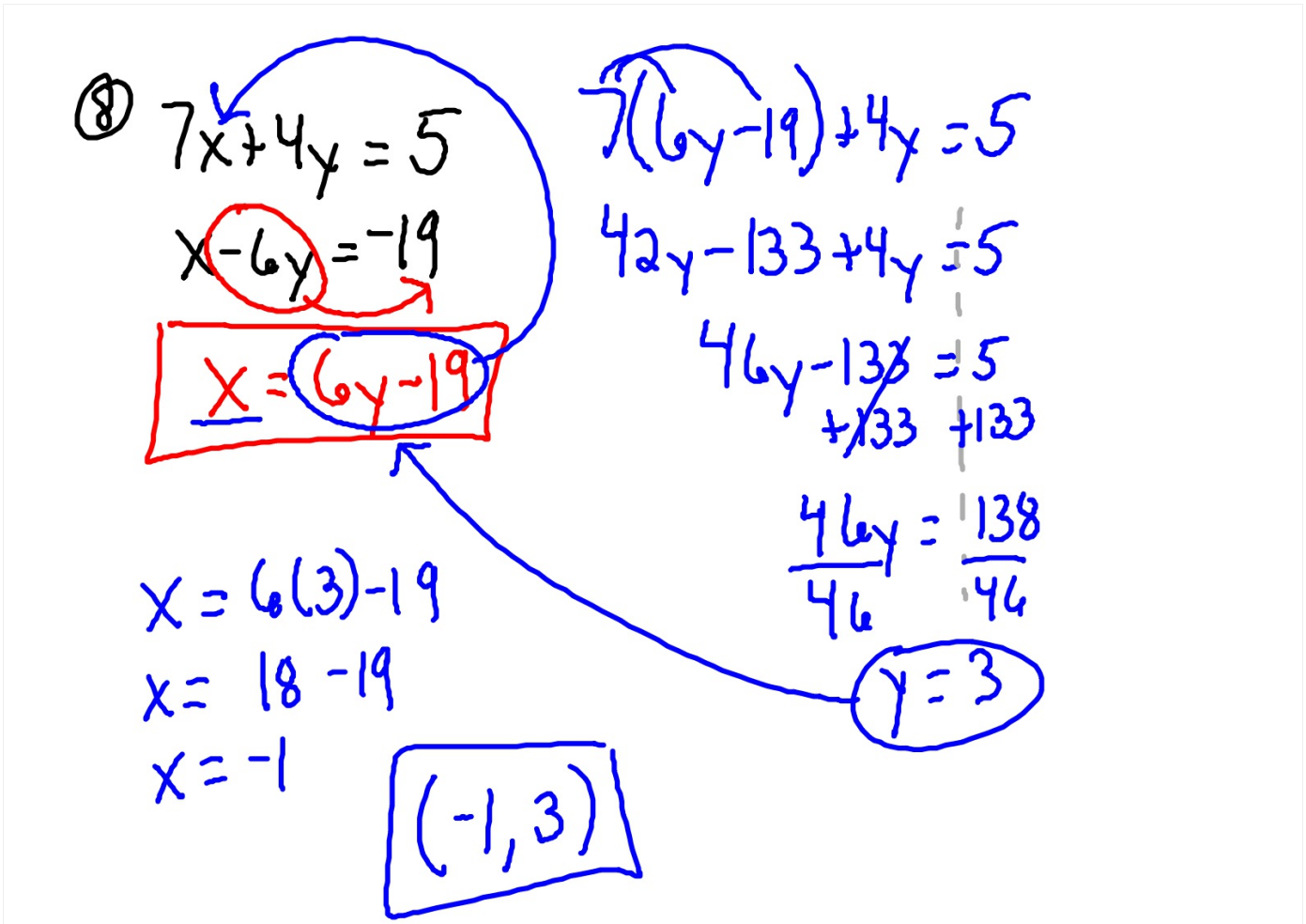
$y = 2x - 2$

$m = \frac{2}{1}$

$b = -2$




7)
-4x+7y=-2
-x-y=5
-y=x+5
y=-x-5
-4x+7(-x-5)=-2
-4x-7x-35=-2
-11x-35=-2
+35 +35
-11x=33
-11 -11
x=-3
y=-(-3)-5
y=3-5
y=-2
(-3,-2)


⑧
7x + 4y = 5
x - 6y = -19
x = 6y - 19
7(6y - 19) + 4y = 5
42y - 133 + 4y = 5
46y - 133 = 5
+133 +133
46y = 138
46 46
y = 3
x = 6(3) - 19
x = 18 - 19
x = -1
(-1, 3)

(13) $2(6x+7y=5) = 12x+14y=10$

$7(4x-2y=-10) = 28x-14y=-70$

$40x = -60$

$\frac{40}{40}x = \frac{-60}{40}$

$x = -1.5$

$6(-1.5)+7y=5$

$-9+7y=5$

$+9 \quad +9$

$\frac{7}{7}y = \frac{14}{7}$

$y = 2$

$(-1.5, 2)$

(14) $-7x+2y=-5$

$10x-2y=6$

$3x=1$

$\frac{3}{3}x=\frac{1}{3}$

$x=1/3$

$\left(\frac{1}{3}, -4/3\right)$

$\frac{-7}{1}\left(\frac{1}{3}\right)+2y=-5$

$3\left(\frac{-7}{3}+2y=-5\right)3$

$-7+6y=-15$

$+7 \quad +7$

$\frac{6y}{6}=\frac{-8}{4}$

$y=-4/3$

(21) $\left(-x + \frac{1}{3}y = -6\right)3$

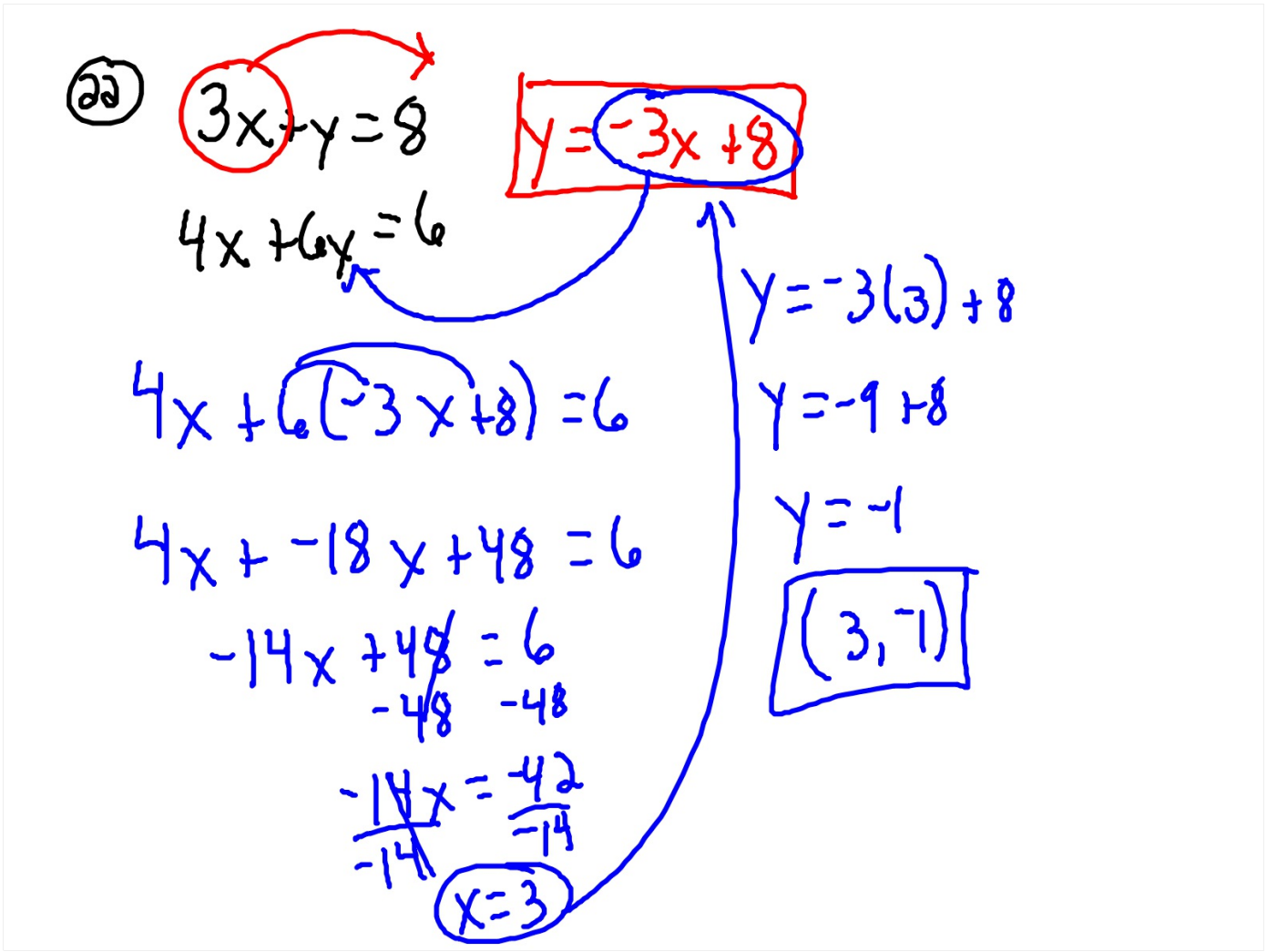
$3x - y = -16$

$-3x + y = -18$

$3x - y = -16$

$0 = -34$

No Solution


(22)
3x + y = 8
y = -3x + 8
4x + 6y = 6
4x + 6(-3x + 8) = 6
4x + -18x + 48 = 6
-14x + 48 = 6
-48 -48
-14x = -42
-14 -14
x = 3
y = -3(3) + 8
y = -9 + 8
y = -1
(3, -1)

(23) $3x-4y=8$

$\left(\frac{9}{2}x-6y=12\right)\cdot 2$

$-3\left(3x-4y=8\right)\cdot -3$

$9x-12y=24$

$-9x+12y=-24$

$9x-12y=24$

$0=0$

Infinite # of solution

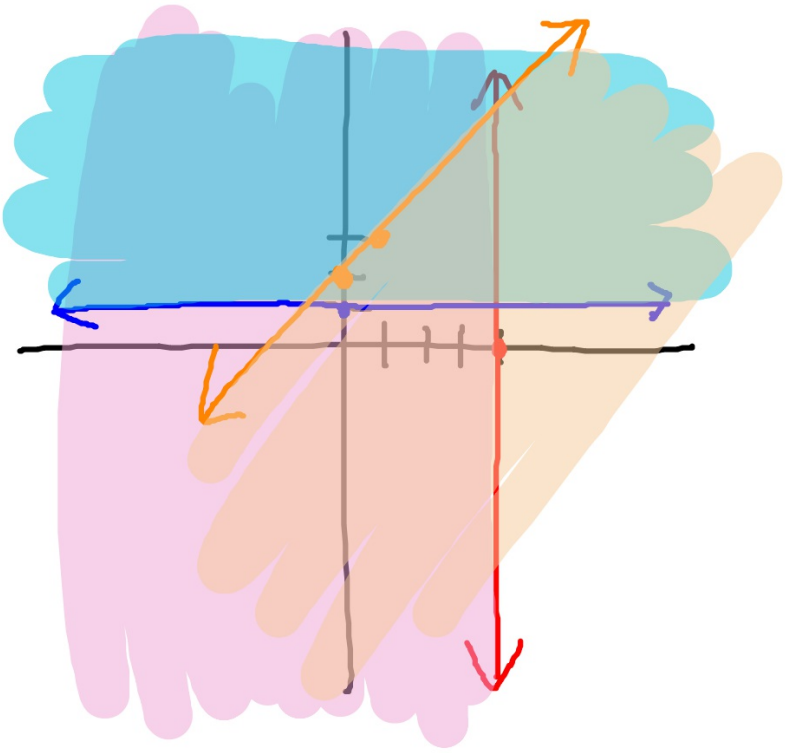
(25) $x \leq 4$

$y \geq 1$

$y \leq x + 2$

$m = \frac{1}{1}$

$b = 2$



(26)

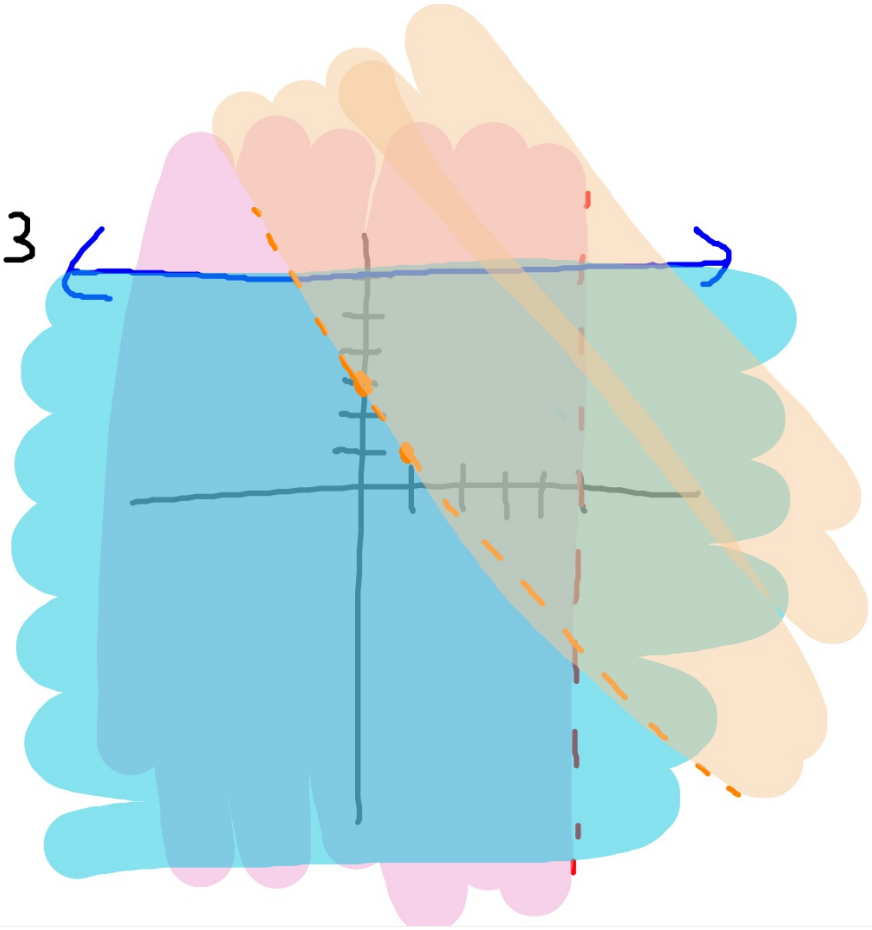
$x < 5$

$y \leq 6$

$y > -2x + 3$

$m = \frac{-2}{1}$

$b = 3$



31

$-4\left(O_y + S = 6\right)^{-4}$

$4 \cdot O_y + 4.45 \cdot S = 25.80$

$-4 \cdot O_y - 4 \cdot S = -24$

$4 \cdot O_y + 4.45S = 25.80$

$.45S = 1.80$

$\frac{.45S}{.45} = \frac{1.80}{.45}$

$S = 4$

$O_y + 4 = 6$

$O_y = 2$