

$$-7x + 15y = 105$$

$$+7x$$

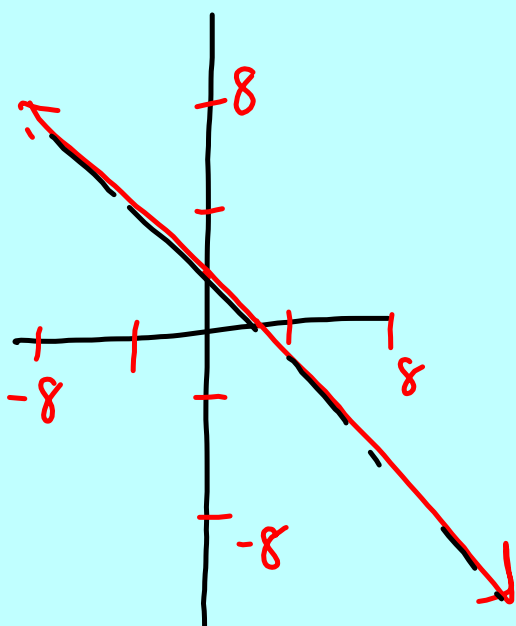
$$\frac{15y}{15} = \frac{105 + 7x}{15}$$

$$y = \frac{105}{15} + \frac{7x}{15}$$

$$y = 7 + \frac{7x}{15}$$

$$-4 \leq x \leq 4$$

$$|x| \leq 4$$



$$2x - 2y = 4$$

$$y = x - 2$$

$$2x - 2(x - 2) = 4$$

$$\cancel{2x} - \cancel{2x} + 4 = 4$$

$$-4 = -4$$

$$0 = 0$$

dependent

$$A = \{11, 13, 15, 17\}$$

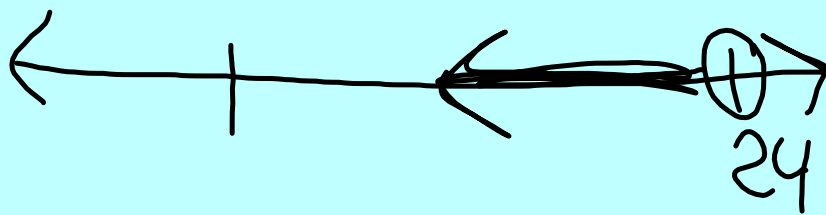
$$C = \{12, 14, 16, 18\}$$

$$AUC = \{11, 12, 13, 14, 15, 16, 17, 18\}$$

$$-\frac{5}{4}x > -30$$

$$\begin{array}{l} \times 4 \qquad \qquad \times 4 \\ -5x > -120 \end{array}$$

$$x < +24 \overset{-5}{/}$$



x-intercept

1) set $y=0$

$$3x - 4(0) = 12$$

$$3x = 12$$

$$x = 4$$

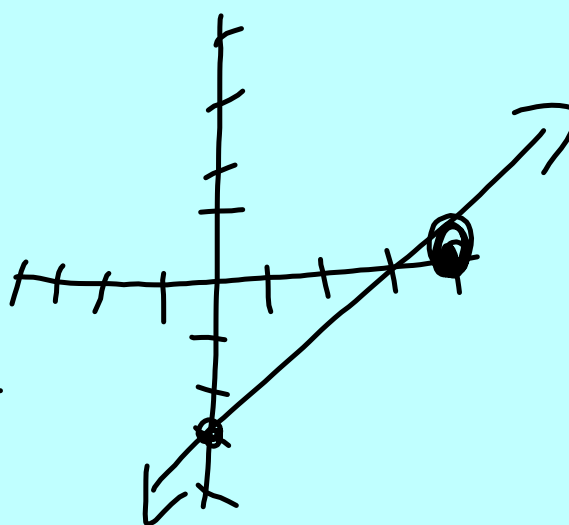
$$3x - 4y = 12$$

y

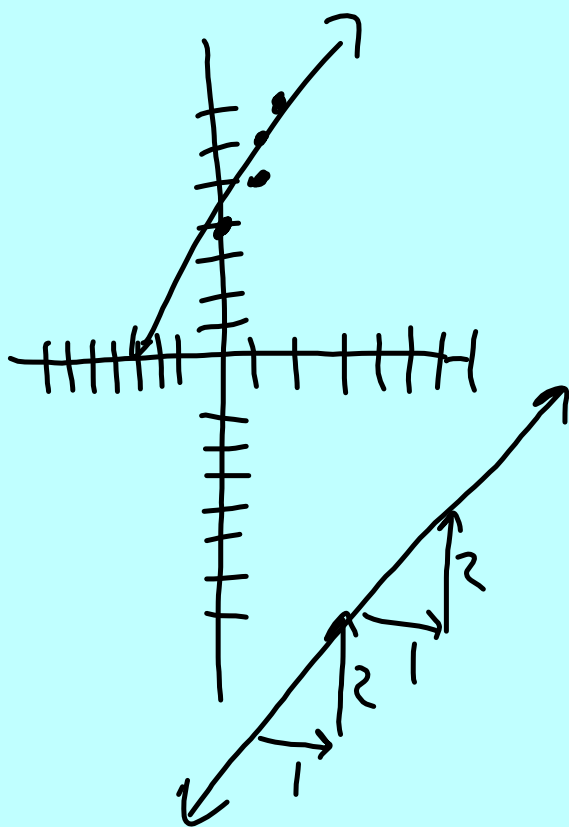
$$3(0) - 4y = 12$$

$$-4y = 12$$

$$y = -3$$

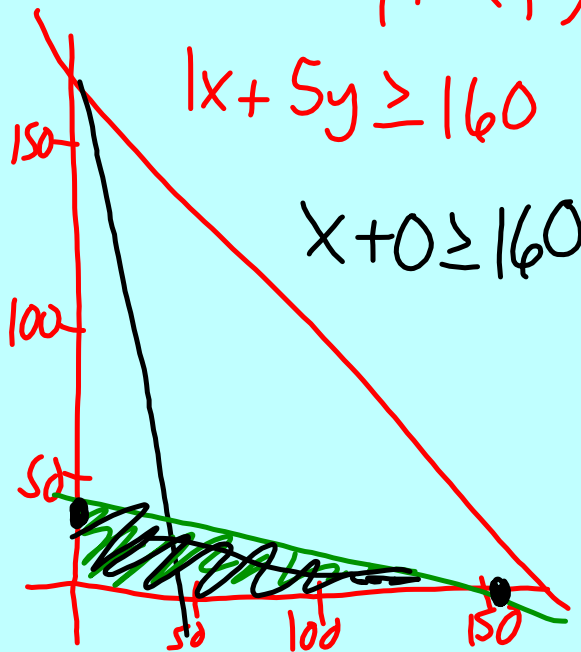


x	y
0	8
1	10
2	12
3	14



Student Tickets = \$1 X Non-S Tickets = \$5 Y Max. capacity 200

Goal = \$160 $X + 5Y \geq 160$



$X + 5Y \geq 160$

$X + 0 \geq 160$

$0 + 5Y \geq 160$

$Y \geq 32$

#disk: $n(x) = x$

\$/disk: $p(x) = 5 - \frac{1}{500}x$

Fixed costs = $f(x) = 100$

Var. costs = $v(x) = 2x$

Finish ↑ 1) Profit: $P(x) = R(x) - C(x)$

2) Revenue: $R(x) = n(x)P(x) = x(5 - \frac{1}{500}x) = 5x - \frac{x^2}{500}$

START ↑ 3) Cost: $C(x) = F(x) + V(x) = 100 + 2x$

$$5x - \frac{x^2}{500} - (100 + 2x)$$

$$5x - \frac{x^2}{500} - 100 - 2x$$

$$3x - \frac{x^2}{500} - 100$$

1

$$1, \frac{1}{6}, \frac{1}{36}, \frac{1}{216}, \frac{1}{1296}$$