

6.4 Homework pg. 330-331 #2, 3, 5, 6, 7

2) Let x = hotdogs Let y = hamburgers

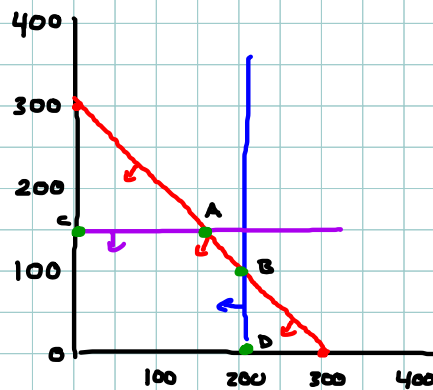
$$x + y \leq 300 \quad y = -x + 300$$

$$x \leq 200 \quad y \leq 150$$

$$R = 3.25x + 4.75y$$

$$A (150, 150) \Rightarrow R = \$1200$$

$$B (200, 100) \Rightarrow R = \$1125$$

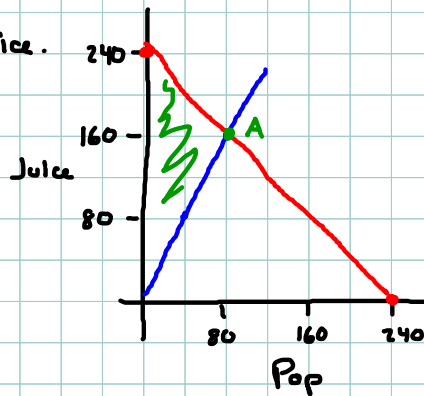


3) Let x = Pop Let y = juice.

$$x + y \leq 240 \quad y = -x + 240$$

$$y \geq 2x \quad y = 2x$$

$$R = 1.25x + 1.00y$$



5) Let x = Lower Deck, Let y = Upper Deck

$$y = -x + 30000$$

$$x + y \geq 30,000$$

$$x \leq 20,000$$

$$y \leq 30,000$$

$$R = 120x + 80y$$



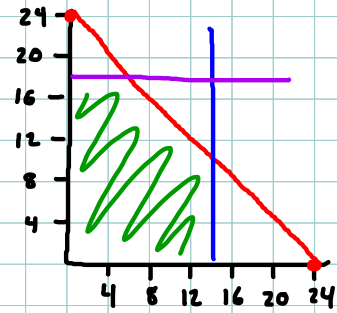
6) a) Let $x = \text{Sung}$ Let $y = \text{Faith}$

$$x \leq 14$$

$$y \leq 10$$

$$x + y \leq 24 \quad y = -x + 24$$

$$\text{Boats} = \frac{x}{3} + \frac{y}{4}$$



b) $\text{Boats} = \frac{x}{3} + \frac{y}{2}$

7) Let $x = \text{wheat}$, Let $y = \text{barley}$

$$x + y \leq 10,000 \quad y = -x + 10,000$$

$$x \geq 3y \quad y = \frac{1}{3}x$$

$$x \geq 0$$

$$y \geq 0$$

$$R = (5.25)50x + (3.6)38y$$

