

Review :

$$6. \quad y = -5x + k \quad \text{y-int}$$

$$y = -7x^2 - 5x + 4$$



$$\text{set } y = y$$

$$-5x + k = -7x^2 - 5x + 4$$

$$\underbrace{7x^2}_{a} + \underbrace{k-4}_{c} = 0 \quad ax^2 + bx + c$$

$b=0$

for 1 solution, $D=0$

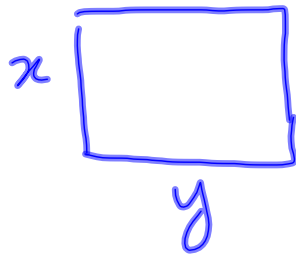
$$b^2 - 4ac = 0$$

$$0^2 - 4(7)(k-4) = 0$$

$$\frac{-28(k-4)}{-28} = \frac{0}{-28}$$

$$k-4 = 0$$
$$k = 4$$

p. 155 # 14.



$$A = xy$$

$$P = 30$$

$$2(x+y) = 30$$

$$2x + 2y = 30$$

$$x + y = 15$$

$$y = 15 - x$$

$$A = x \cdot y$$

$$A = x(15 - x)$$



$$A = x(15 - x)$$

$$\text{set } A = 0$$

$$0 = x(15 - x)$$

$$x = 0 \quad 15 - x = 0$$
$$x = 15$$

$$x_v = \frac{0 + 15}{2}$$

$$x_v = 7.5$$

$$y = 15 - x$$
$$= 15 - 7.5$$
$$= 7.5$$