

SHANKU KILLIAMS

MAT 102 ASSIGNMENT

19/ENG 05/059

MECHATRONICS

Solution

$$\text{let } x_1 = 5$$

$$y_1 = 3$$

$$x_2 = 15$$

$$y_2 = -7$$

$$m:n = 3:1$$

$$P = \left( \frac{mx_2 - ny_1}{m-n}, \frac{my_2 - nx_1}{m-n} \right)$$

$$P = \left( \frac{3(15) - 1(3)}{3-1}, \frac{3(-7) - 1(5)}{3-1} \right)$$

$$P = \left( \frac{45-3}{2}, \frac{-21-3}{2} \right)$$

$$P = \left( 40/2, -24/2 \right)$$

$$P = (20, -12)$$