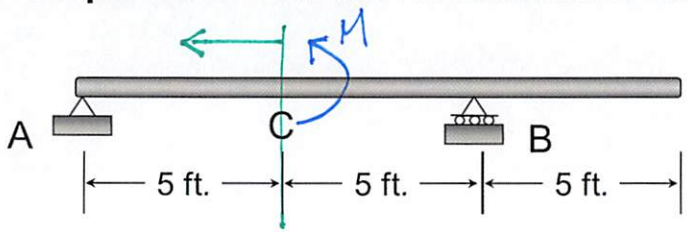
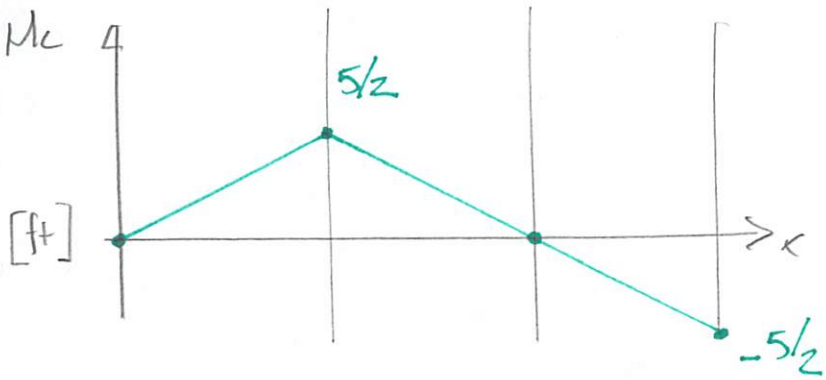
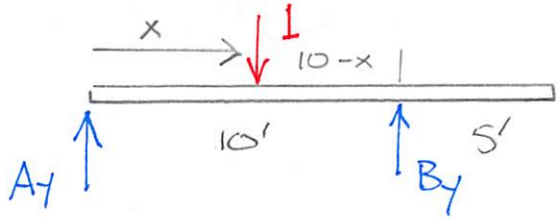
Example 6a-3: Construct the ***influence line*** for the moment at C





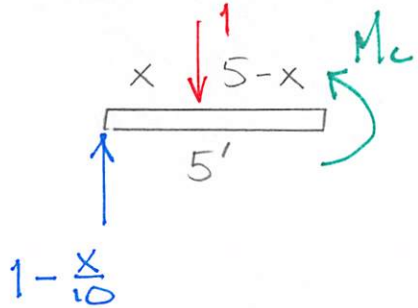
INFLUENCE A_y



$$\circlearrowleft + \sum M_B = 0 = 1(10-x) - A_y(10')$$

$$A_y = 1 - \frac{x}{10}$$

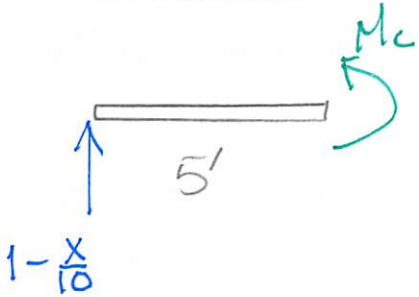
$0 \le x \le 5$ ft LOCATION OF UNIT LOAD



$$\circlearrowleft + \sum M_c = 0 = M_c + 1(5-x) - \left(1-\frac{x}{10}\right)5$$

$$M_c = \frac{x}{2}$$

$5 \le x \le 15$ ft



$$\circlearrowleft + \sum M_c = 0 = M_c - \left(1-\frac{x}{10}\right)5\text{ ft}$$

$$M_c = 5 - \frac{x}{2}$$