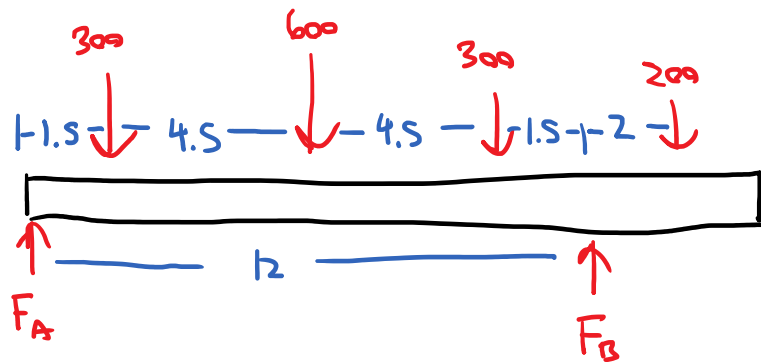
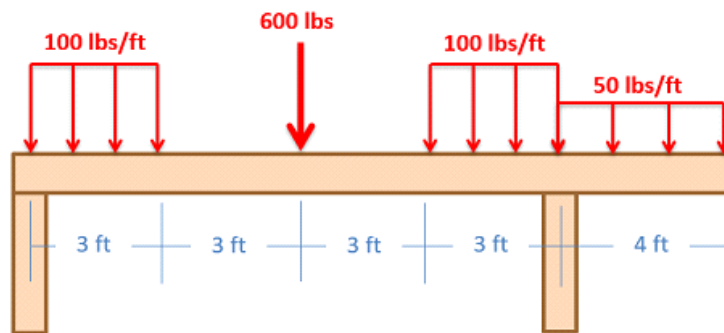


## Problem 2

A horizontal wooden beam in the lobby of a new hotel is going to be supported and loaded as shown below. Draw the shear and moment diagrams for the beam.



$$\sum F_y = F_A + F_B - 300 - 600 - 300 - 200 = 0$$

$$\sum M_A = (F_B)(12) - (300)(1.5) - (600)(6) - (300)(10.5) - (200)(14) = 0$$

$$F_B = 833.33 \text{ lbs}$$

$$F_A = 566.67 \text{ lbs}$$

