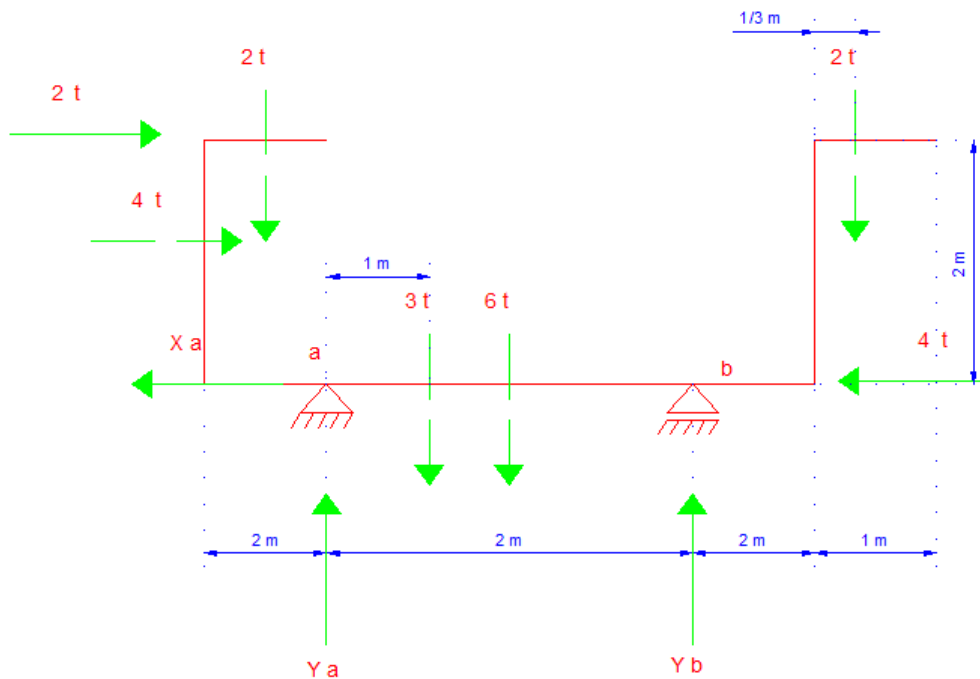
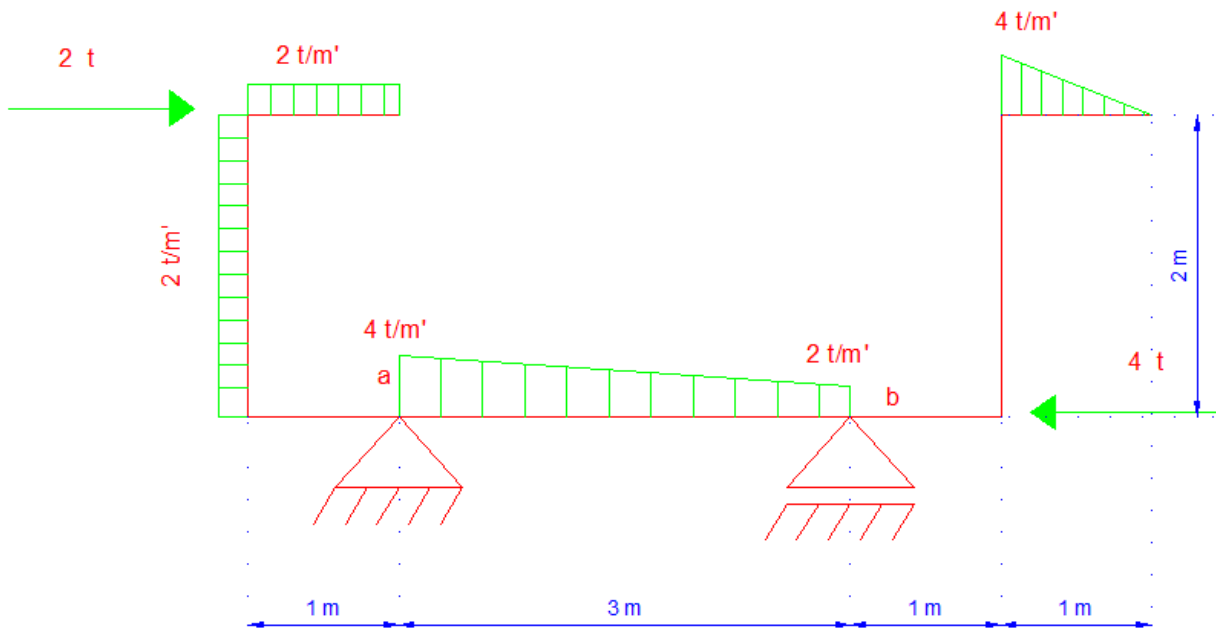


Problem 2

For the following beam find the reactions



SOL.

$$\sum F_x = 0$$

$$X_a = 2 + 4 - 4 = 2 \text{ t}$$

$$\sum M_a = 0$$

$$-2 \times 0.5 + 4 \times 1 + 3 \times 1 + 6 \times 1.5 + 2 \times 13 / 3 - y_b \times 3 = 0$$

$$Y_b = 7.889 \text{ t}$$

$$\sum F_y = 0$$

$$Y_a - 2 - 3 - 6 + 7.889 - 2 = 0$$

$$Y_a = 5.111 \text{ t}$$