Question 1b

Shear Force at 0 meters = 0Kn

Shear Force at 1 meter $\quad 0 - (5 \times 1) = -5\text{kN}$

Shear Force at 2 meters $\quad 0 - (5 \times 2) = -10kN$

Introduce upward force R1 of 26.7 so $-10 + 26.7 = 16.7kN$

Shear Force at 3 meters $\quad 0 - (5 \times 3) + 26.7 = 11.7kN$

Introduce downward force of 10Kn so $11.7 - 10 = 1.7kN$

Shear Force at 4 meters $\quad 0 - (5 \times 4) + 26.7 - 10 = -3.33kN$

Shear Force at 5 meters $\quad 0 - (5 \times 5) + 26.7 - 10 = -8.33kN$

Shear Force at 6 meters $\quad 0 - (5 \times 6) + 26.7 - 10 = -13.33kN$

Shear Force at 7 meters $\quad 0 - (5 \times 7) + 26.7 - 10 = -18.33kN$

Shear Force at 8 meters $\quad 0 - (5 \times 8) + 26.7 - 10 = -23.33kN$

At this point we need to add R2= 53.33 so $0 - (5 \times 8) + 26.7 - 10 + 53.3 = 30kN$

Shear Force at 9 meters $\quad 0 - (5 \times 9) + 26.7 - 10 + 53.3 = 24.93kN$

Shear Force at 10 meters $\quad 0 - (5 \times 10) + 26. -10 + 53.3 - 20 = 0kN$