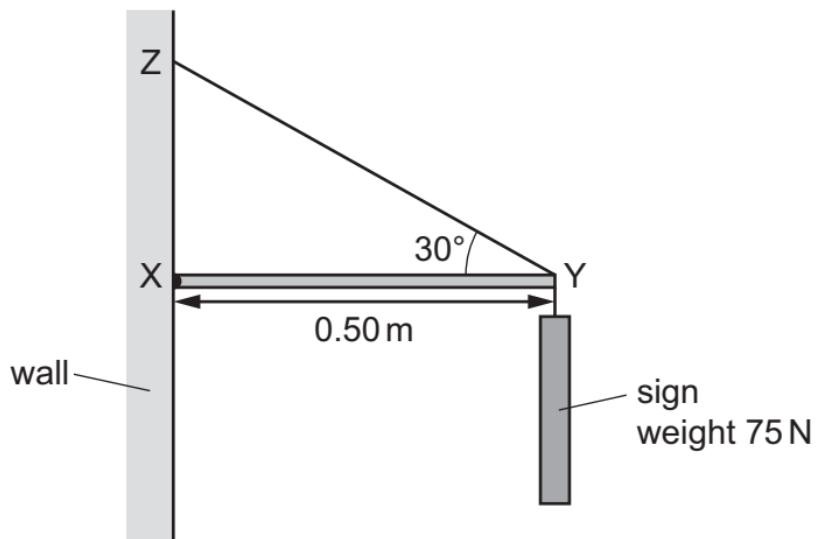


- 11 A shop sign weighing 75 N hangs from a frame attached to a vertical wall.



The frame consists of a horizontal rod XY and a rod YZ that is at an angle of 30° to the horizontal. Rod XY is attached to the wall by a hinge at X and has length 0.50 m. Assume that the weights of the rods are negligible.

What is the horizontal force exerted by the wall on rod XY?

- A 0 N B 43 N C 130 N D 150 N

- 12 A truck with a mass of 10 000 kg is travelling at a velocity of 20 m/s along a