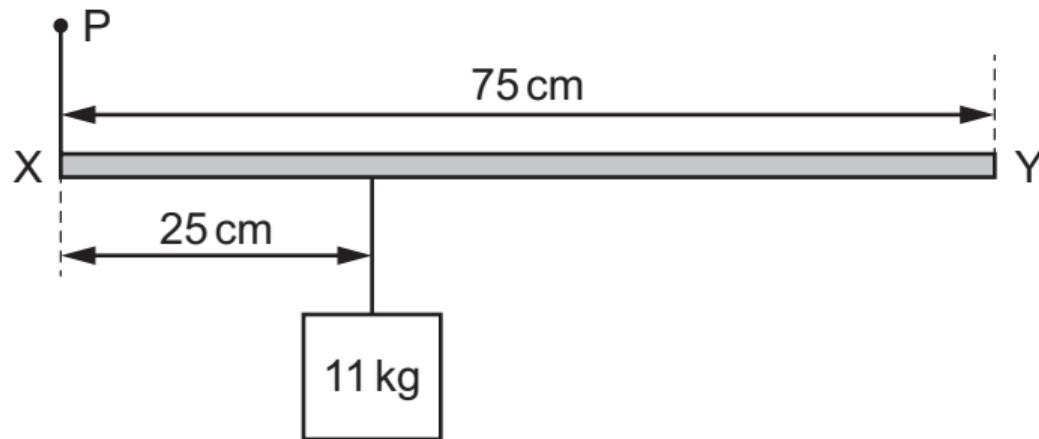


- 13 A rigid rod XY has negligible mass and length 75 cm. The rod is suspended from a fixed point P by a string attached to end X. An object of mass 11 kg is suspended by a string that is attached to the rod at a distance of 25 cm from end X, as shown.



Which vertically upward force acting on end Y of the rod would hold the rod horizontally in equilibrium?

A 3.7 N

B 33 N

C 36 N

D 320 N

- 14 The density of air is 1.2 kg m^{-3} . The density of benzene is 1.2 g cm^{-3} .