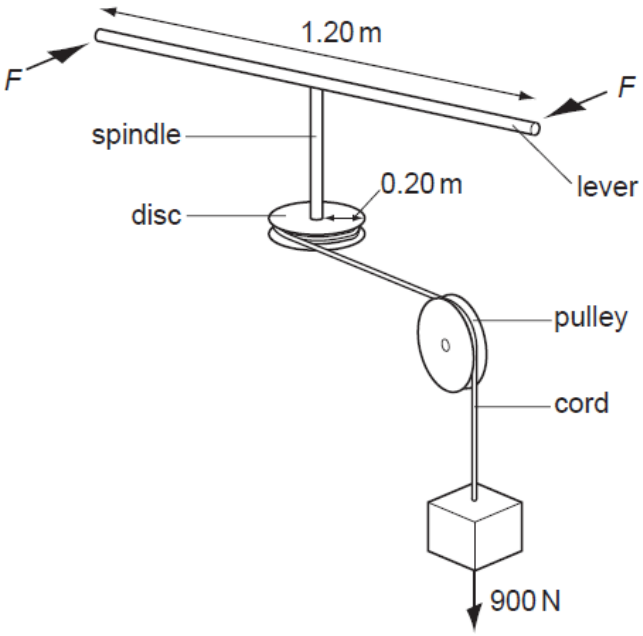
6 One end of a spindle is attached to the centre of a lever of length 1.20 m and its other end is attached to the centre of a disc of radius 0.20 m as shown in the figure below.

A cord is wrapped around the disc, passes over a pulley and is attached to a 900 N weight at one end.



The mass of the lever, spindle, disc, cord and pulley is assumed to be negligible. Equal and opposite forces of magnitude F is applied to each end of the lever.

Ignoring frictional forces, what is the minimum value of F needed to balance the 900 N weight?

A 75 N

B 150 N

C 300 N

D 950 N