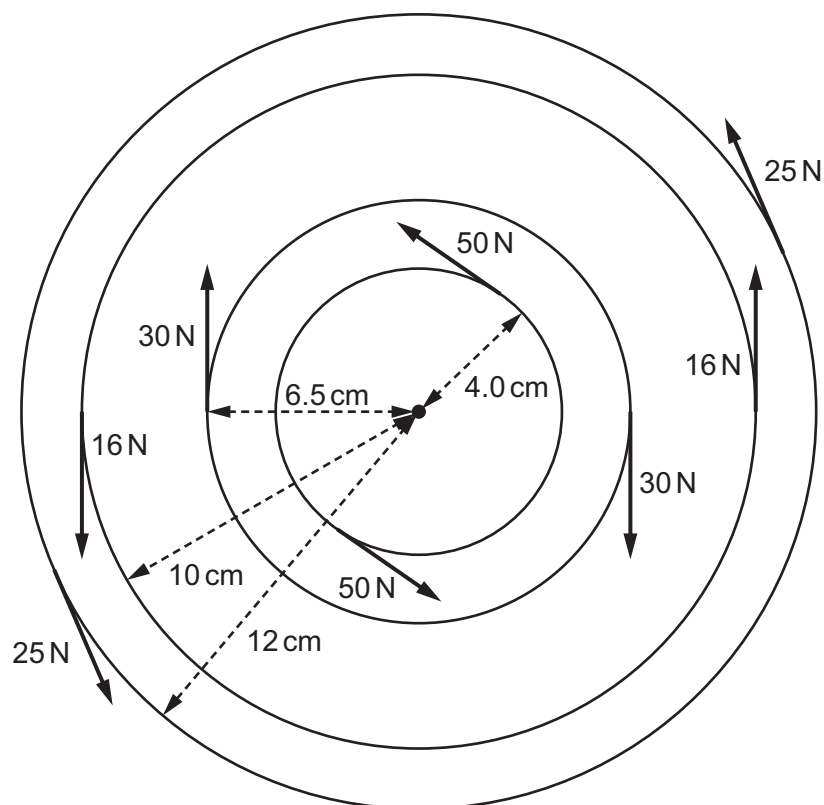


- 11 In a machine, many couples act on a rotating object as shown.



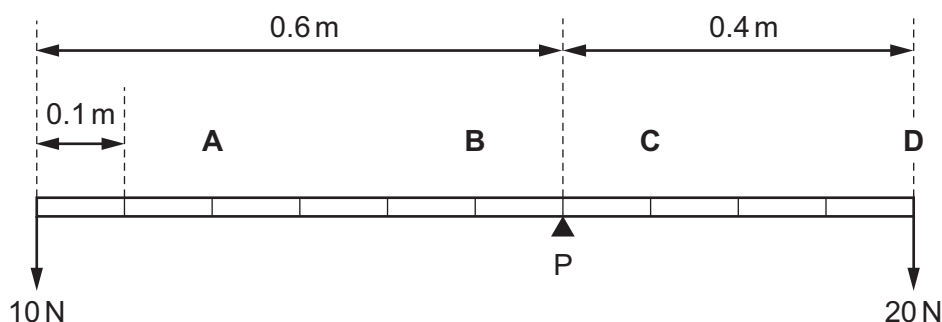
What is the resultant torque acting on the rotating object?

- A 4.7 Nm B 8.6 Nm C 9.3 Nm D 17.1 Nm

- 12 A uniform beam is pivoted at P as shown. Weights of 10 N and 20 N are attached to its ends.

The length of the beam is marked at 0.1 m intervals. The weight of the beam is 100 N.

At which point should a further weight of 20 N be attached to achieve equilibrium?



- 13 What are the SI base units of the quantity $\frac{\text{pressure}}{\text{density}}$?

- A s^{-2} B $\text{kg}^2 \text{s}^{-2}$ C $\text{kg}^2 \text{m}^2 \text{s}^{-2}$ D $\text{m}^2 \text{s}^{-2}$