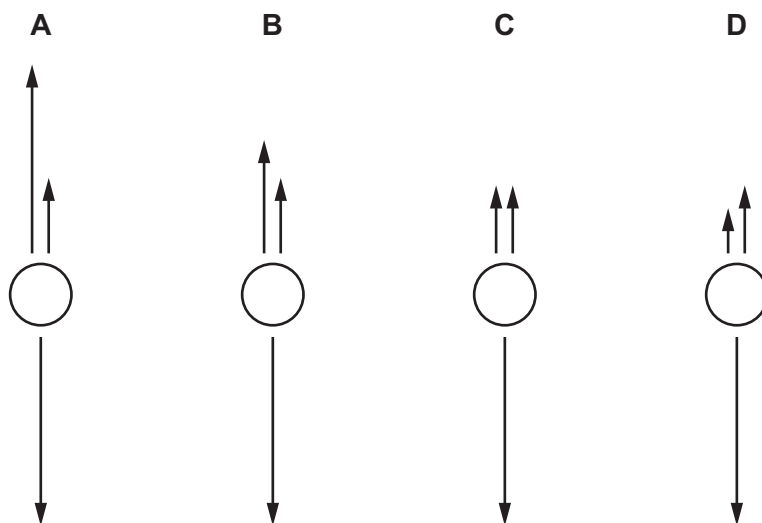
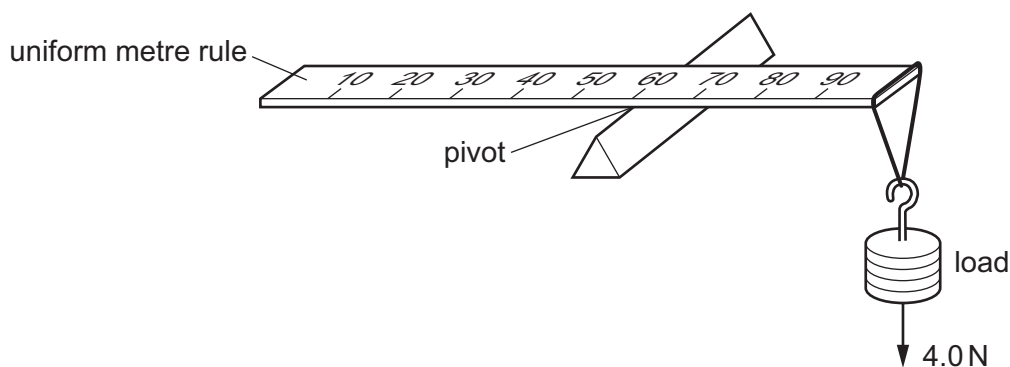


- 11 A spherical object falls through water at constant speed. Three forces act on the object.

Which diagram, showing these three forces to scale, is correct?



- 12 A uniform metre rule of weight  $2.0\text{ N}$  is pivoted at the  $60\text{ cm}$  mark. A  $4.0\text{ N}$  load is suspended from one end, causing the rule to rotate about the pivot.



At the instant when the rule is horizontal, what is the resultant moment about the pivot?

- A  $0.0\text{ Nm}$       B  $1.4\text{ Nm}$       C  $1.6\text{ Nm}$       D  $1.8\text{ Nm}$