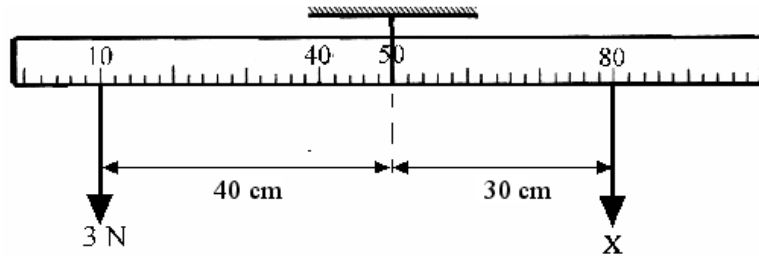


## Question 1

(g)



A uniform metre stick, suspended at its mid-point is balanced as shown.  
Calculate **force X**.

Calculate \_\_\_\_\_

## Question 2

(b) State the **law of the lever**.

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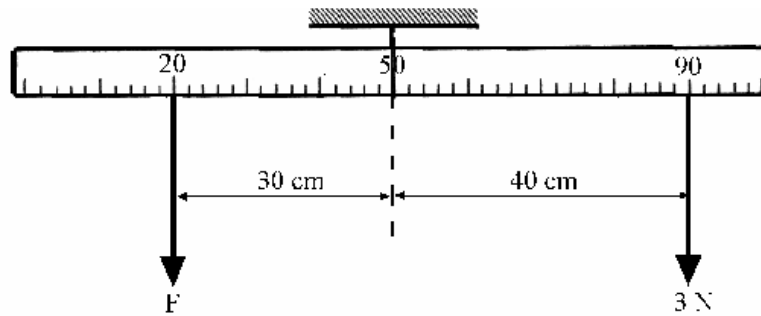
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Question 3

(c) Define *moment of a force*.

(6)

(1) (2)



The diagram shows a metre stick suspended from its centre of gravity. A force of 3 N acts on the stick at the 90 cm mark and a force of  $F$  N acts on the stick at the 20 cm mark. The metre stick is balanced horizontally. Calculate *force F*. (6)

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Give an *everyday example of an application of the lever*, using a labelled diagram, showing the *fulcrum* and at least *one force* acting on the lever. Use the box provided for your labelled diagram. (6)