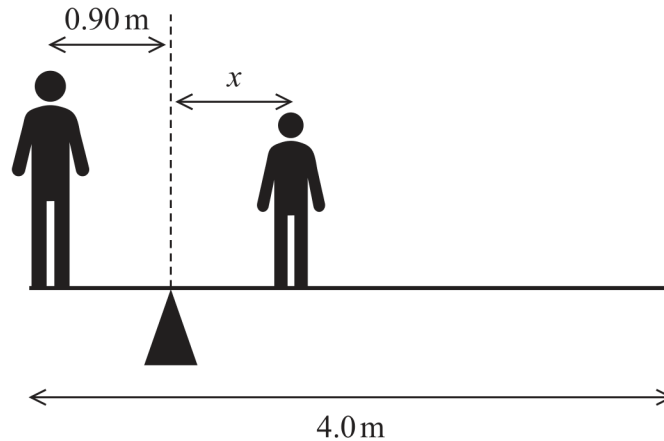


## SECTION B

**Answer ALL questions in the spaces provided.**

- 11** A uniform plank of length 4.0 m is pivoted 0.90 m from one end. The weight of the plank is 250 N. A person of weight 950 N stands at one end of the plank. A person of weight 650 N stands a distance  $x$  from the pivot so that the plank is in equilibrium, as shown.



- (a) Add to the diagram to show the forces acting on the plank.

(2)

- (b) Calculate the distance  $x$ .

(3)

$x =$  .....

(Total for Question 11 = 5 marks)

DO NOT WRITE IN THIS AREA

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