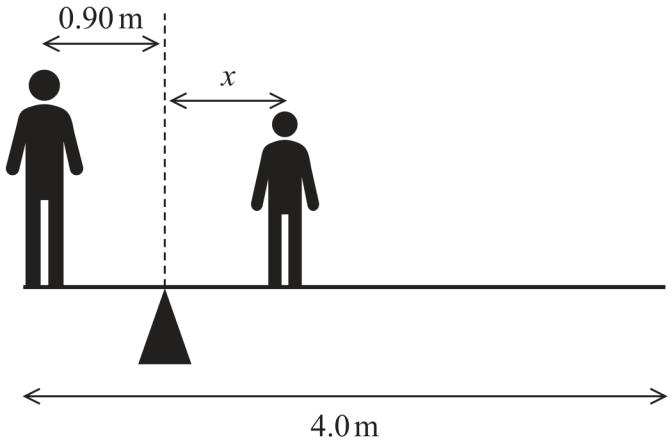
SECTION B

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)