Question 5 (4 marks)
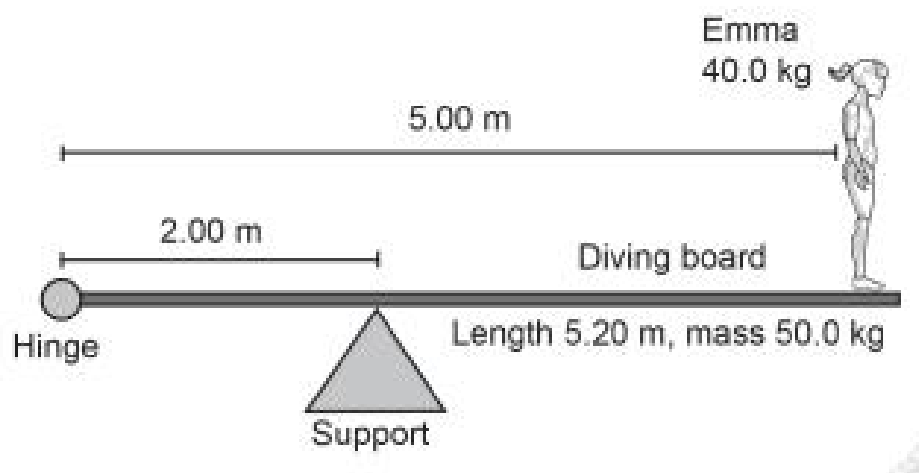
Emma stands 20.0 cm from the end of a 5.20 m long uniform diving board. Calculate the upwards force the support must exert on the 50.0 kg board for the system to remain in equilibrium.

Emma
40.0 kg

5.00 m

2.00 m

Diving board

Hinge

Length 5.20 m, mass 50.0 kg

Support

_____ N