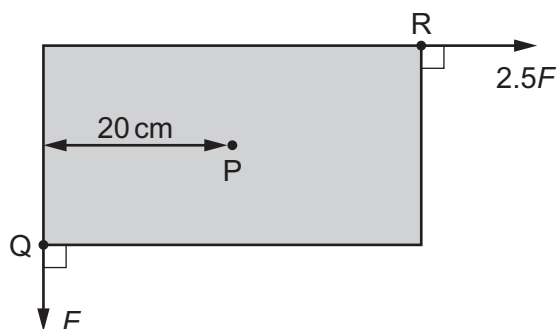


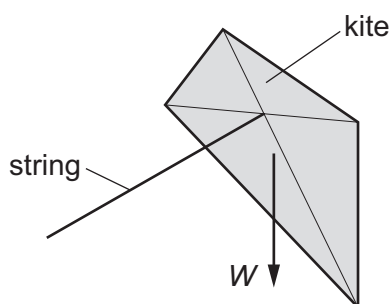
- 12 A uniform rectangular board is supported by a frictionless pivot at its centre point P.



Two forces act in the plane of the board. Force F acts at corner Q and force $2.5F$ acts at corner R. The perpendicular distance between the line of action of force F and point P is 20 cm. The board is in equilibrium.

What is the area of the board?

- A** 160 cm^2 **B** 320 cm^2 **C** 640 cm^2 **D** 1600 cm^2
- 13 A kite is in equilibrium at the end of a string, as shown.



The kite has three forces acting on it: the weight W , the tension T in the string, and the force F from the wind.

Which vector diagram represents the forces acting on the kite?

