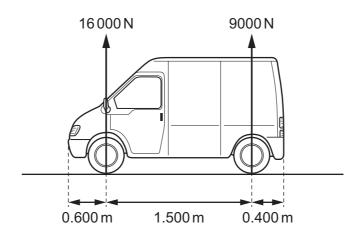
13 The vertical forces that the ground exerts on a stationary van are shown.

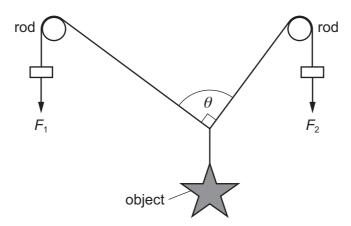


The van is 2.50 m long with the wheels at a distance of 0.600 m from the front of the van and 0.400 m from the rear of the van.

What is the horizontal distance of the van's centre of gravity from the front of the van?

- **A** 0.540 m
- **B** 0.960 m
- **C** 1.14 m
- **D** 1.36 m

14 An object hangs by means of two cords around two rods, as shown.



The object is held in equilibrium by the forces F_1 and F_2 . The object weighs 10 N. There is negligible friction between the rods and cords. Angle θ is 90°.

Which row of the table gives an angle θ of 90°?

	F ₁ /N	F ₂ /N
Α	4.0	6.0
В	6.0	4.0
С	6.0	8.0
D	8.0	6.0