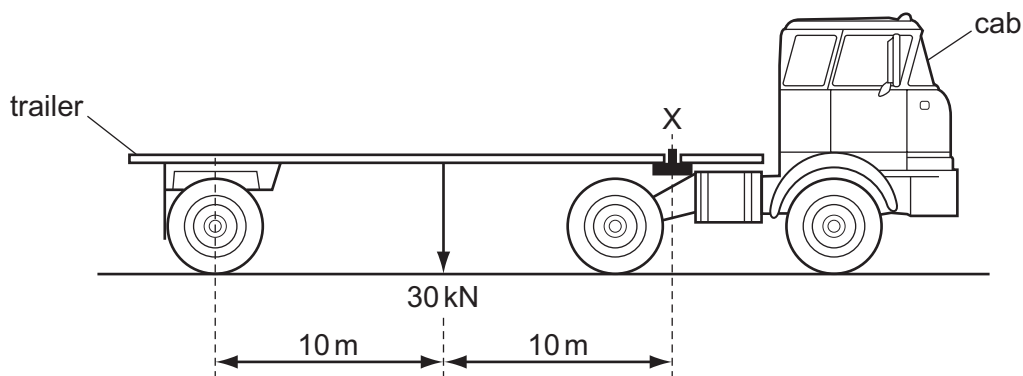


- 14 A trailer of weight 30 kN is hitched to a cab at X, as shown in the diagram.



What is the upward force exerted by the cab on the trailer at X?

- A 3 kN B 15 kN C 30 kN D 60 kN
- 15 When a horizontal force F is applied to a frictionless trolley over a distance s , the kinetic energy of the trolley changes from 4 J to 8 J.
- If a force of $2F$ is applied to the trolley over a distance of $2s$, what will the original kinetic energy of 4 J become?
- A 16 J B 20 J C 32 J D 64 J
- 16 The kinetic energy of a vehicle of mass 1000 kg is 4.5×10^5 J. It is braked with a total constant braking force of 6000 N.

What will be its stopping distance?

- A 37 m B 75 m C 150 m D 300 m

Space for working