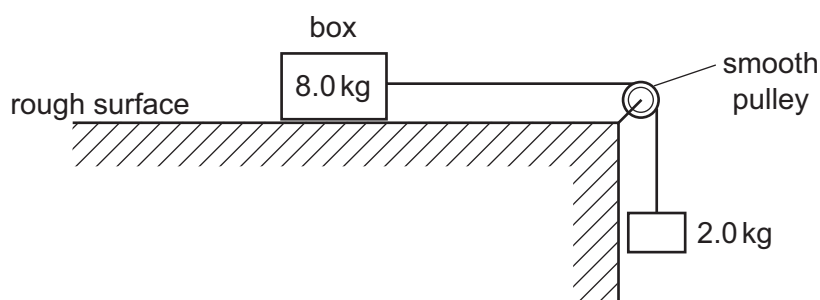


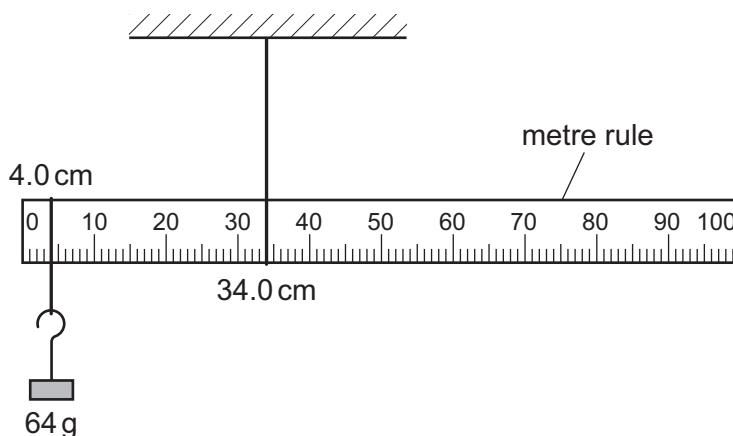
- 13 A box of mass 8.0 kg rests on a horizontal rough surface. A string attached to the box passes over a smooth pulley and supports a 2.0 kg mass at its other end.



When the box is released, a frictional force of 6.0 N acts on it.

What is the acceleration of the box?

- A 1.4 ms^{-2} B 1.7 ms^{-2} C 2.0 ms^{-2} D 2.6 ms^{-2}
- 14 What is the **definition** of the force on a body?
- A the mass of the body multiplied by its acceleration
B the power input to the body divided by its velocity
C the rate of change of momentum of the body
D the work done on the body divided by its displacement
- 15 A uniform metre rule is pivoted at the 34.0 cm mark, as shown.



The rule balances when a 64 g mass is hung from the 4.0 cm mark.

What is the mass of the metre rule?

- A 38 g B 44 g C 120 g D 136 g