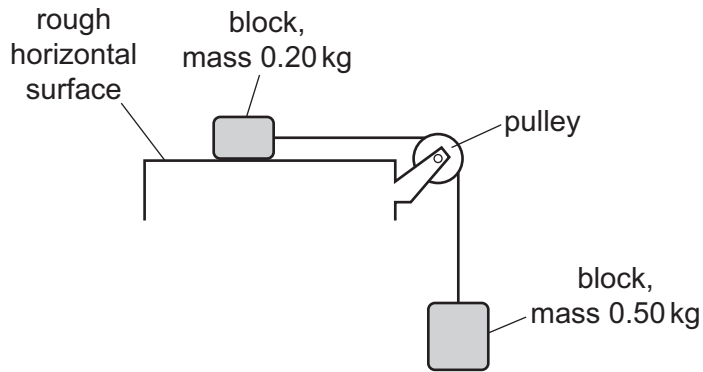


- 7 Two blocks, of mass 0.20 kg and 0.50 kg, are connected by a light inextensible string that passes over a frictionless pulley.



The blocks are initially held stationary. The block of mass 0.20 kg rests on a rough horizontal surface.

The block of mass 0.50 kg is suspended in air. Air resistance is negligible.

When the blocks are released, they have an acceleration of magnitude  $2.0 \text{ m s}^{-2}$ .

What is the magnitude of the frictional force between the block of mass 0.20 kg and the rough surface?

**A** 3.5 N

**B** 3.9 N

**C** 4.5 N

**D** 6.3 N