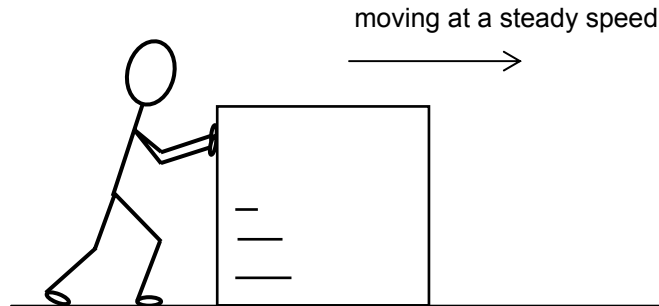


2

A large box is sitting on a level floor. Sam exerts a force forwards  $\longrightarrow$  on the box, and it moves at a steady speed across the floor.



Think about the forces **exerted by the box on Sam** while he is pushing. Which of the following statements is correct?

Tick *ONE* box (✓)

- While Sam is pushing, he exerts a force on the box. The box does **not** exert a force on Sam.
- While Sam is pushing, he exerts a force on the box. The box also exerts a force on Sam in the opposite, ie. (  $\longleftarrow$  ), direction. The force exerted on Sam by the box is **smaller**.
- While Sam is pushing, he exerts a force on the box. The box also exerts a force on Sam in the opposite, ie. (  $\longleftarrow$  ), direction. The two forces are **the same size**.
- While Sam is pushing, he exerts a force on the box. The box also exerts a force on Sam in the opposite, ie. (  $\longleftarrow$  ), direction. The force exerted on Sam by the box is **bigger**.