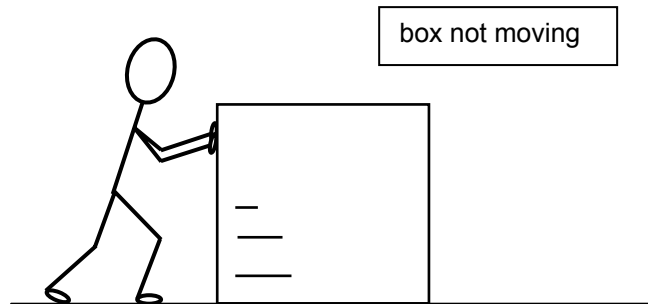


1

A large box is sitting on a level floor. Sam exerts a force forwards \longrightarrow on the box but it does not move.



Think about the force 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**.