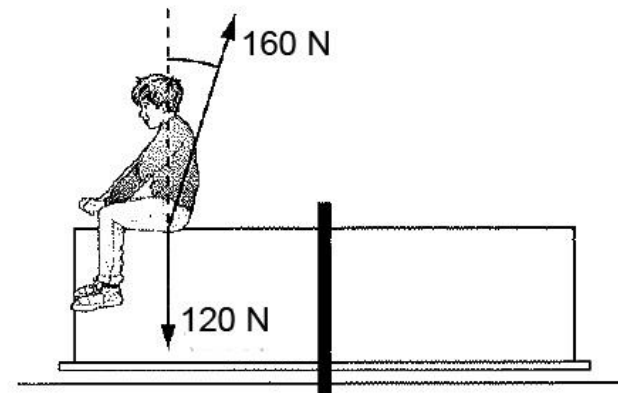**8** A boy is sitting on a playground turntable and is rotating with uniform angular velocity.

The reaction force that the turntable exerts on the child is 160 N.
The weight of the boy is 120 N.

What is the acceleration of the boy?

A 0.88 m s^{-2} **B** 3.3 m s^{-2} **C** 8.7 m s^{-2} **D** 84.3 m s^{-2}