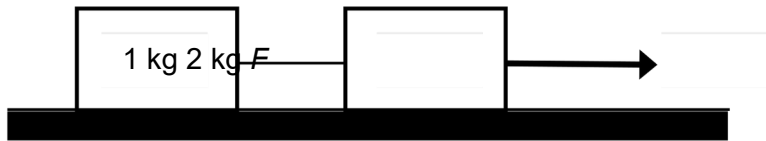**5** The frictionless system shown is accelerated by an applied force of magnitude F.

What is the tension in the string between the blocks?

A $\frac{1}{3}F$ **B** $\frac{1}{2}F$ **C** F **D** $2F$