19 A grasshopper of mass 0.12 g jumps vertically. It uses its back legs over a time of 0.020 s to jump, leaving the ground with a velocity of 3.0 m s^{-1}.

What is the average power developed by the legs of the grasshopper?

A 9.0×10^{-3} W **B** 1.8×10^{-2} W **C** 2.7×10^{-2} W **D** 37 W