9 A capacitor discharges through a resistor. The time constant of the circuit is 5 s.

What is the time taken, in s, for the charge on the plates of the capacitor to halve?

☒ **A** 0.5 ln 2

☒ **B** 0.5 ln 5

☒ **C** 2 ln 5

☒ **D** 5 ln 2

(Total for Question 9 = 1 mark)