

- 30** A radioactive source has a half-life of 20 hours. At the start of an experiment, a Geiger counter records an average count-rate of 20 s^{-1} in the absence of the source. When the source is placed in front of the Geiger counter, the average count-rate recorded is 100 s^{-1} .

What is the average count-rate recorded by the Geiger counter after 60 hours?

A 10 s^{-1}

B 13 s^{-1}

C 30 s^{-1}

D 47 s^{-1}

End of Paper 1