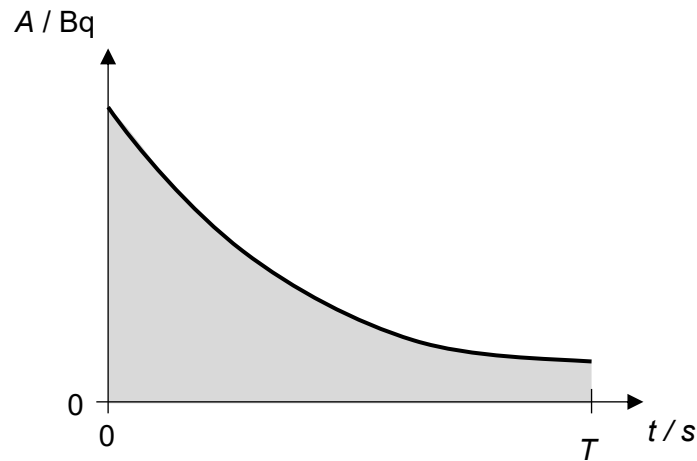


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The graph shows the variation with time  $t$  of the activity  $A$  of a pure sample of a radioactive nuclide. The total energy released due to radioactive decay of the sample in time  $T$  is  $E$ . The area of the shaded portion is  $S$ .



What does the quantity  $\frac{E}{S}$  represent?

**A**

The number of decays which occur in time  $T$

|

**B**

The average power due to radioactive decay

|

**C**

The average energy produced in time  $T$

**D**

The energy released for each radioactive decay

|