1. For a reaction $\frac{1}{2}A \rightarrow 2B$, rate of disappearance of 'A' is related to the rate of appearance of 'B' by the expression

[2008]

(a) $-\dfrac{d[A]}{dt} = \dfrac{1}{2}\dfrac{d[B]}{dt}$

(b) $-\dfrac{d[A]}{dt} = \dfrac{1}{4}\dfrac{d[B]}{dt}$

(c) $-\dfrac{d[A]}{dt} = \dfrac{d[B]}{dt}$

(d) $-\dfrac{d[A]}{dt} = 4\dfrac{d[B]}{dt}$