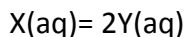## Answer on Question #68286, Chemistry / General Chemistry

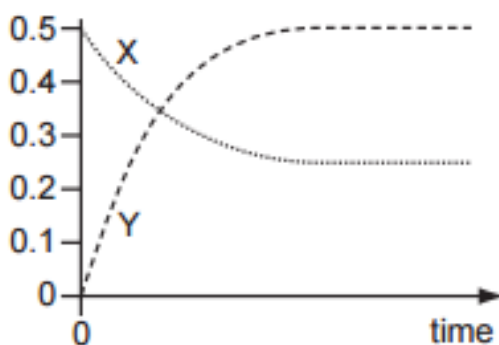A dimer, X, is stable when solid but a dynamic equilibrium is set up in solution.

$$X(aq) = 2Y(aq)$$

A solution of X has an initial concentration of 0.50 mol dm–3. When equilibrium has been reached [X(aq)] has fallen to 0.25moldm–3.

The changes in [X(aq)] and [Y(aq)] are plotted against time until equilibrium is reached. The value of Kc is then calculated. Which graph and value for Kc are correct?

Answer: Kc = 1