

12 Nitrogen dioxide decomposes on heating according to the equation shown.



When 4 mol of nitrogen dioxide were put into a 1 dm^3 container and heated to a constant temperature, the equilibrium mixture contained 0.8 mol of oxygen.

What is the value of the equilibrium constant, K_c , at the temperature of the experiment?

A $\frac{0.8^2 \times 0.8}{4^2}$

B $\frac{1.6 \times 0.8}{2.4^2}$

C $\frac{1.6^2 \times 0.8}{4^2}$

D $\frac{1.6^2 \times 0.8}{2.4^2}$