none of these

\[
p = K
\]

(d) \( p = K \)

\[
pp((RRTT)) = KK((cc))KKcc^2
\]

2. The relationship between \( p \) has the value 0.800 atm for the reaction \( K \). What is the value of \( °p \)?

\[
\begin{align*}
\text{(a)} & \quad 2.28 \text{ atm} \\
\text{(b)} & \quad 4.1 \times 10^{-5} \text{ atm}^{-1} \\
\text{(c)} & \quad 10.2 \text{ atm} \\
\text{(d)} & \quad 131 \text{ atm} \\
\text{(e)} & \quad \text{none of these}
\end{align*}
\]

3. For the reaction \( \text{N}_2 (g) + 3\text{H}_2 (g) \rightarrow 2\text{NH}_3 (g) \) came to equilibrium. How much \( \text{Cl}_2 (g) \) was formed?

\[
\begin{align*}
\text{(a)} & \quad 0.0348 \text{ mole} \\
\text{(b)} & \quad 0.0828 \text{ mole} \\
\text{(c)} & \quad 0.0899 \text{ mole} \\
\text{(d)} & \quad 16.4 \text{ atm}^3 \\
\text{(e)} & \quad \text{none of the above}
\end{align*}
\]

4. Gaseous carbon dioxide is partially dissociated according to the equilibrium:

\[
\text{CO}_2 (g) \rightarrow \text{CO}(g) + \frac{1}{2}\text{O}_2 (g)
\]

At equilibrium, the total pressure in the container was found to be 3.20 atm at a temperature of 500 K. How much \( \text{CO}_2 (g) \) is present in a 500 mL container and react to reach equilibrium?

\[
\begin{align*}
\text{(a)} & \quad 0.016 \text{ atm} \\
\text{(b)} & \quad 2.0 \times 10^{-6} \text{ atm} \\
\text{(c)} & \quad 4.2 \times 10^{-6} \text{ atm} \\
\text{(d)} & \quad 1.3 \times 10^{-4} \text{ atm} \\
\text{(e)} & \quad \text{none of these}
\end{align*}
\]

5. An initial pressure of \( \text{CO}_2 \) of 1.000 atm is placed in a closed container at 2000 K. 1.60% of the introduced \( \text{CO}_2 \) will react to reach equilibrium. What is the value of the equilibrium constant? For reaction 1 would be:

\[
\begin{align*}
\text{(a)} & \quad 1.3 \times 10^{-4} \text{ atm}^{-1} \\
\text{(b)} & \quad 22 \times 10^{-6} \text{ atm}^{-2} \\
\text{(c)} & \quad 3.0 \text{ atm}^{-2} \\
\text{(d)} & \quad 6.2 \text{ L}^2 \text{ mol}^{-2} \\
\text{(e)} & \quad \text{none of these}
\end{align*}
\]

6. For the reaction below, calculate the equilibrium constant. What is the temperature of 500 atm, after which equilibrium is allowed to be reached. If \( y \) is the partial pressure of \( \text{H}_2 \) at 600 K for the reaction:

\[
\begin{align*}
\text{(a)} & \quad (2 - 2y)^2 / (y^2) (2y) \\
\text{(b)} & \quad (2 - y)^2 / (y^2) (y/2) \\
\text{(c)} & \quad (2 - 2y)^2 / (y^2) (2y) (y) \\
\text{(d)} & \quad (2 - y)^2 / (y^2) (y) \\
\text{(e)} & \quad \text{none of the above}
\end{align*}
\]

7. The values of the equilibrium constants for two reactions are given below. If, at a given temperature, the equilibrium constant for the reaction:

\[
\begin{align*}
\text{(a)} & \quad 0.872\% \\
\text{(b)} & \quad 0.650\% \\
\text{(c)} & \quad 0.872\% \\
\text{(d)} & \quad 88.3\% \\
\text{(e)} & \quad \text{none of these}
\end{align*}
\]

(a) the temperature shows a sharp rise.
(b) all chemical reactions stop.
(c) the concentration of the reactants and products become equal.
(d) the forward reaction stops.
(e) the forward reaction becomes equal.