The gases are mixed in stoichiometric proportion, so we'll have "P" bar of $N_2$ and "3P" bar of $H_2$ initially

ICE:

| | $N_2$ | + $3H_2$ | ⇌ $2NH_3$ |
|---|---|---|---|
| i | P | 3P | 0 |
| c | −x | −3x | +2x |
| e | P−x | 3P−3x | 2x |

Since 41.49% of the gas is $NH_3$ at equilibrium, then $P_{NH_3} = (110)(0.4149) = 45.639$ bar

From the "e" line above, the pressure of $H_2$ will be 3 times the pressure of $N_2$. So:

$$z + 3z + 45.639 = 110$$

$$\Rightarrow z = 16.09025 \text{ bar} = P_{N_2,e}$$

$$3z = 48.27075 \text{ bar} = P_{H_2,e}$$

$$K_p = \frac{P_{NH_3,e}^2}{P_{N_2,e} \cdot P_{H_2,e}^3} = \frac{(45.639)^2}{(16.09025)(48.27075)^3}$$

$$= \boxed{1.15 \times 10^{-3}}$$