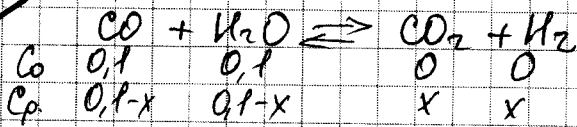


11.11.11



$$C_0 = \frac{p}{V} = \frac{2}{20} = 0,1 \text{ mol/l}$$

$$K_p = \frac{[\text{H}_2][\text{CO}_2]}{[\text{H}_2\text{O}][\text{CO}]}$$

$$K_p = \frac{x \cdot x}{(0,1-x)(0,1-x)} = \frac{x^2}{(0,1-x)^2}$$

$$\frac{x^2}{(0,1-x)^2} = 0,51$$

$$\frac{x}{0,1-x} = 0,71$$

$$x = 0,71(0,1-x)$$

$$x = 0,071 - 0,71x$$

$$1,71x = 0,071$$

$$x = 0,0415 \text{ mol/l}$$

$$[\text{CO}_2] = [\text{H}_2] = 0,042 \text{ mol/l}$$

$$[\text{CO}] = [\text{H}_2\text{O}] = 1 - 0,042 = 0,058 \text{ mol/l}$$

$$V(\text{CO}_2) = V(\text{H}_2) = 0,042 \cdot 20 = 0,84 \text{ mol}$$

$$V(\text{CO}) = V(\text{H}_2\text{O}) = 0,058 \cdot 20 = 1,16 \text{ mol}$$

