12. The pressure p_1 due to the first gas is $p_1 = n_1 RT/V$, and the pressure p_2 due to the second gas is $p_2 = n_2 RT/V$. So the total pressure on the container wall is

$$p = p_1 + p_2 = \frac{n_1 RT}{V} + \frac{n_2 RT}{V} = (n_1 + n_2)\frac{RT}{V} \ .$$

The fraction of P due to the second gas is then

$$\frac{p_2}{p} = \frac{n_2 RT/V}{(n_1 + n_2)(RT/V)} = \frac{n_2}{n_1 + n_2} = \frac{0.5}{2 + 0.5} = \frac{1}{5} \ .$$