Open the stopcock

$$
\begin{array}{rcc}
\text{initial values:} & p_A,\, V_A,\, T_A & p_B,\, V_B,\, T_B \\
\text{initial mole numbers:} & n_A = \dfrac{p_A V_A}{R T_A} & n_B = \dfrac{p_B V_B}{R T_B} \\
\text{final values:} & p,\, V_A,\, T_A & p,\, V_B,\, T_B \\
\text{final mole numbers:} & n_{A,f} = \dfrac{p V_A}{R T_A} & n_{B,f} = \dfrac{p V_B}{R T_B}
\end{array}
$$

Particle number (and mole number) is conserved during this process, so

$$
\begin{aligned}
n_A + n_B &= n_{A,f} + n_{B,f} && (1)\\
\frac{p_A V_A}{R T_A} + \frac{p_B V_B}{R T_B} &= \frac{p V_A}{R T_A} + \frac{p V_B}{R T_B} && (2)\\
\frac{p_A V_A}{T_A} + \frac{p_B V_B}{T_B} &= p\left(\frac{V_A}{T_A} + \frac{V_B}{T_B}\right) && (3)\\
p_A V_A T_B + p_B V_B T_A &= p\,(V_A T_B + V_B T_A) && (4)\\
\frac{p_A V_A T_B + p_B V_B T_A}{V_A T_B + V_B T_A} &= p && (5)
\end{aligned}
$$

Plugging in the numbers supplied (including $V_B = 3.3\,V_A$) gives

$$
p = \frac{p_A V_A T_B + p_B (3.3\,V_A) T_A}{V_A T_B + (3.3\,V_A) T_A} = \frac{p_A T_B + 3.3\,p_B T_A}{T_B + 3.3\,T_A} = 2.1 \times 10^5 \text{ Pa.} \tag{6}
$$

Note that if you found algebraic expressions for $n_{A,f}$ or $n_{B,f}$ in terms of initial quantities, or if you calculated numerical values for the initial mole numbers n_A and n_B, you were doing *way too much work*. (And here I mean work in the sense of intellectual activity and effort, not in the sense of thermodynamics.)

Grading: 2 points for setup, such as defining quantities;
2 points for realizing (equation 1) that conservation of particle number is the key;
2 points for setting up equation (2);
2 points for reaching solution (5);
2 points for finding the number (6).