

EXERCISES (CONTINUED)

11. $v_{rms} = \sqrt{\frac{3k_B T}{m}}$. Solve for k_B .

12. $F = \frac{1}{4\pi\epsilon_0} \frac{q_1 q_2}{r^2}$. Solve for r .

13. $\frac{1}{s_i} + \frac{1}{s_o} = \frac{1}{f}$. Solve for f .

14. $\frac{1}{C_{EQ}} = \frac{1}{C_1} + \frac{1}{C_2}$. Solve for C_1 .

15. $V = \frac{4}{3}\pi r^3$. Solve for r .