

- 20.64.** Consider a Diesel cycle that starts (at point a in Fig. 20.7) with air at temperature T_a . The air may be treated as an ideal gas.
- (a) If the temperature at point c is T_c , derive an expression for the efficiency of the cycle in terms of the compression ratio r .
- (b) What is the efficiency if $T_a = 300$ K, $T_c = 950$ K, $\gamma = 1.40$, and $r = 21.0$?