

The drawing shows a circuit that contains a battery, two resistors, and a switch. Consider the circuit with $R_1 = 67.5$, $R_2 = 98.1$, and $V = 9.7$.

(a) What is the equivalent resistance of the circuit when the switch is open and closed?

$$R_{\text{open}} = R_1 + R_2 = 165.6 \ \Omega$$

$$R_{\text{close}} = \infty \Omega$$

(b) What is the total power delivered to the resistors when the switch is open and closed?

$$P_{\text{open}} = V^2/R = 0.57 \text{ W}$$

$$P_{\text{close}} = 0 \text{ W}$$