31.20. **Visualize:** Please refer to Figure Ex32.20.

Solve: The three resistors are in series. The total resistance of this combination is

$$R_{eq} = R + 50 \ \Omega + R = 2R + 50 \ \Omega$$

Thus, $R_{eq} > 50 \ \Omega$ as long as $R > 0 \ \Omega$.