

What resistance must be placed in parallel with a 157 Ohms resistor to make the equivalent resistance 113 Ohms ? _____ Ohms

Use equation for the parallel connection:

$$\frac{1}{R_t} = \frac{1}{R_1} + \frac{1}{R_2}$$

$$\frac{1}{113} = \frac{1}{R} + \frac{1}{157} \rightarrow \frac{1}{R} = \frac{1}{113} - \frac{1}{157} \rightarrow R = \frac{113 * 157}{157 - 113} = 404.2\Omega$$

Answer: $R = 404.2\Omega$