



Ohm's Law and Power Matrix

TWO KNOWN VALUES		VOLTAGE V	CURRENT I or A	RESISTANCE R or Ω	POWER P or W
VOLTAGE V	CURRENT I or A			$R = \frac{V}{I}$	$P = V \times I$
VOLTAGE V	RESISTANCE R or Ω		$I = \frac{V}{R}$		$P = V^2 \div R$
VOLTAGE V	POWER P or W		$I = \frac{P}{V}$	$R = \frac{V^2}{P}$	
CURRENT I or A	RESISTANCE R or Ω	$V = I \times R$			$P = I^2 \times R$
CURRENT I or A	POWER P or W	$V = \frac{P}{I}$		$R = \frac{P}{I^2}$	
RESISTANCE R or Ω	POWER P or W	$V = \sqrt{P \times R}$	$I = \sqrt{P \div R}$	LearnElectrics.com	