

# **Fundamentals of Engineering in a Flash**

***Rapid Review of Key Topics  
for the FE/EIT Exam***

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How many gallons are in  $1 \text{ ft}^3$ ?

7.48 gal

What is Poisson's ratio?

This is a constant that relates lateral strain to axial strain for an axially loaded member.

6

$$\nu = - \frac{\epsilon_{\text{lateral}}}{\epsilon_{\text{axial}}}$$

What is Kirchhoff's law of radiation?

This law states that for any two bodies in thermal equilibrium, their ratios of emissive power to absorptivity are equal.

$$\frac{E_1}{\alpha_1} = \frac{E_2}{\alpha_2}$$