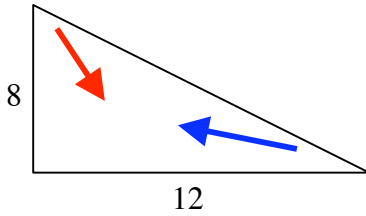


Right Triangles

For each triangle determine a) slope, b) the length of the missing side, c) the angles of the triangle.

Example:



$$\text{slope} = m = \frac{8}{12} = \frac{2}{3}$$

$$\text{length of hypotenuse} \Rightarrow c^2 = a^2 + b^2 \Rightarrow$$

$$c^2 = 8^2 + 12^2 \Rightarrow c^2 = 64 + 144 \Rightarrow c^2 = 208 \Rightarrow$$

$$c = \sqrt{208} = 14.42$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}} \Rightarrow \tan \theta = \frac{8}{12} \Rightarrow \tan \theta = 0.6667 \Rightarrow \theta = 33.69$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}} \Rightarrow \tan \theta = \frac{12}{8} \Rightarrow \tan \theta = 1.5 \Rightarrow \theta = 56.3$$

