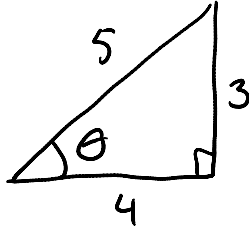


Section 4.2: Applications of Right Triangles

Wednesday, November 05, 2014
9:13 AM

Calculating angles:



how do you calculate θ if you know the sides of the triangle?

$$\sin \theta = \frac{3}{5}$$

$$\theta = \arcsin\left(\frac{3}{5}\right)$$

$$= \sin^{-1}\left(\frac{3}{5}\right)$$

note: the -1 is not
an exponent

$$\sin^{-1}\left(\frac{3}{5}\right) \neq \frac{1}{\sin\left(\frac{3}{5}\right)}$$

BLAME MATHEMATICIANS!

so, on your calculator, you should have a \sin^{-1} button

$$\theta = \sin^{-1}\left(\frac{3}{5}\right)$$

$$= 36.8699^\circ$$

← make sure
calculator in
DEGREES!