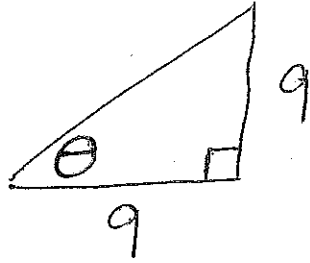


Inverse Trigonometry

12/11

Inverse means "undo" or "going backwards!"

How do we solve for the unknown angle θ ?



$$\tan \theta = \frac{9}{9}$$

$$\cancel{\tan}^{-1}(\cancel{\tan} \theta) = \cancel{\tan}^{-1}\left(\frac{9}{9}\right)$$

$$\theta = \tan^{-1}\left(\frac{9}{9}\right)$$

$$\theta = 45^\circ$$

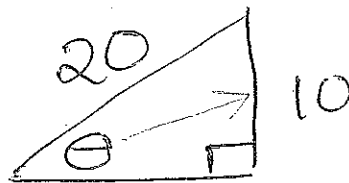
Inverse Trig functions

\sin^{-1}
Inverse Sine

\cos^{-1}
Inverse Cosine

\tan^{-1}
Inverse Tangent

(ex)



$$\sin \theta = \frac{10}{20}$$

$$\cancel{\sin}^{-1}(\cancel{\sin} \theta) = \cancel{\sin}^{-1}\left(\frac{10}{20}\right)$$

$$\theta = \sin^{-1}\left(\frac{10}{20}\right)$$

$$\theta = 30^\circ$$