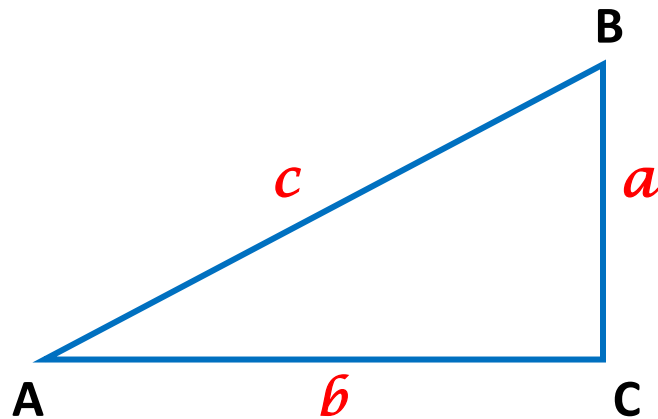# Fundamental Identities – Cofunctions

Just Observations – Patterns

$$\sin A = \cos B = \frac{a}{c}$$

$$\tan A = \cot B = \frac{a}{b}$$

$\sin A = \cos (90 - A)$ ------------ $\cos A = \sin (90 - A)$

$\tan A = \cot (90 - A)$ ------------ $\cot A = \tan (90 - A)$

Reciprocally Related Functions

$$\sin A = \frac{1}{\csc A} \qquad\qquad \csc A = \frac{1}{\sin A} \qquad\qquad \sin A\ \csc A = 1$$

$$\cos A = \frac{1}{\sec A} \qquad\qquad \sec A = \frac{1}{\cos A} \qquad\qquad \cos A\ \sec A = 1$$

$$\tan A = \frac{1}{\cot A} \qquad\qquad \cot A = \frac{1}{\tan A} \qquad\qquad \tan A\ \cot A = 1$$