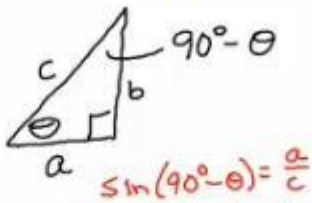
Math 122 – Trigonometry Name_____
Section [4.1] Video Worksheet – 9th Edition

Right Triangle Trigonometry

Sine = *Cose* = *Tangent* =

SOH CAH TOA



Cofunction Identities

$\sin\theta = \frac{b}{c}$ $\csc\theta = \frac{c}{b}$

$\cos\theta = \frac{a}{c}$ $\sec\theta = \frac{c}{a}$

$\tan\theta = \frac{b}{a}$ $\cot\theta = \frac{a}{b}$

$\sin(90°-\theta) = \frac{a}{c}$ $\csc\theta\,(90°-\theta) = \frac{c}{a}$

$\cos(90°-\theta) = \frac{b}{c}$ $\sec\theta\,(90°-\theta) = \frac{c}{b}$

$\tan(90°-\theta) = \frac{a}{b}$ $\cot(90°-\theta) = \frac{b}{a}$

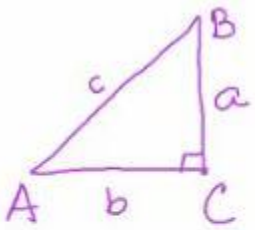
$\sin\theta = \cos(90°-\theta)$ $\csc\theta = \sec(90°-\theta)$

$\cos\theta = \sin(90°-\theta)$ $\sec\theta = \csc(90°-\theta)$

$\tan\theta = \cot(90°-\theta)$ $\cot\theta = \tan(90°-\theta)$

$a^2 + b^2 = c^2$

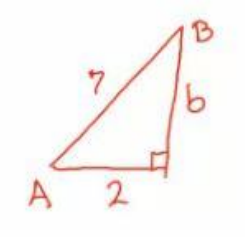
$A + B = 90°$



Bearings always start from N-S line

$a = 2$

$c = 7$



Find the exact values of the six trig functions from each picture