Math 140 – Pre-Calculus   Name_____
Section 5.3 Video Examples

$\sin\theta = \dfrac{12}{13}$ $\qquad \dfrac{\pi}{2} \le x \le \pi$

Find $\sin(2\theta)$

$\qquad \cos(2\theta)$

$\qquad \tan(2\theta)$

$\sin\theta = -\dfrac{3}{5}$ $\qquad \dfrac{3\pi}{2} \le x \le 2\pi$

Find $\sin\left(\dfrac{\theta}{2}\right)$
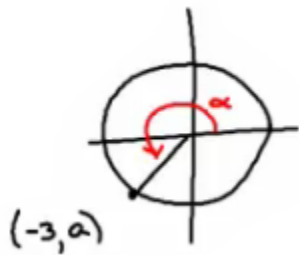
$\qquad \cos\left(\dfrac{\theta}{2}\right)$

$\qquad \tan\left(\dfrac{\theta}{2}\right)$

$\cos 105°$
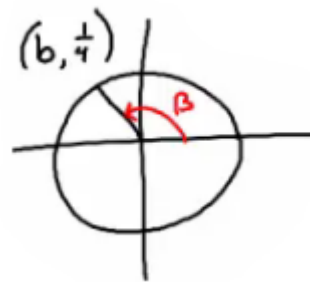
$\tan \dfrac{5}{8}$

$\sin \dfrac{3\pi}{8} =$

$x^2 + y^2 = 10$

$x^2 + y^2 = 1$

$f(x) = \sin x$

$f(2\alpha)$

$f\left(\dfrac{\beta}{2}\right) =$

$8\sin^4 x =$

$\cos^4\theta - \sin^4\theta = \cos(2\theta)$

$4\sin^2 x \cos^2 x =$

$\tan\left(\dfrac{\alpha}{2}\right) = \dfrac{\tan\alpha}{\sec\alpha + 1}$

Solve on $0 \le \theta \le 2\pi$

$\sin 2\theta = \sin\theta$