

Warmup: Trig on the Calculator

degrees →

$$1. \tan 36.9^\circ =$$

Round to the hundredth: .75

degrees →

$$2. \cot 53.1^\circ = \frac{1}{\tan 53.1}$$

Round to the hundredth: .75

use inverse →

$$3. \tan \theta = \frac{3}{4} \quad \theta = \tan^{-1}\left(\frac{3}{4}\right)$$

- a. Round to the tenth of a degree: 36.9°
 $36.86989765 - 36 = .86989765 (60) = 52.19385875$
- b. Round using degree and nearest minute: 36°52'

use reciprocal

$$4. \cot x = \frac{3}{4} \quad \tan x = \frac{4}{3}$$

use inverse

$$\tan x = \frac{4}{3} \quad x = \tan^{-1} \frac{4}{3}$$

- a. Round to the tenth of a degree: 53.1°
 $53.13010235 - 53 = .13010235 (60) = 7.80614125$
- b. Round using degree and nearest minute: 53°8'

degrees →

$$5. \sin 27^\circ 13' 14'' =$$

Round to the tenth: .5

≈ .4574

← Radians

$$6. \csc \frac{2\pi}{3} = \frac{1}{\sin \frac{2\pi}{3}}$$

Round to the tenth: 1.2

≈ 1.154700538