Section 2.3 Finding Trigonometric Function values Using a Calculator

Example 1: Use a calculator to approximate the value of each expression.

a) $\sin 41°30'$ Round to 8 decimal places.

b) $\sec 58°24'$ Round to 8 decimal places.

c) $\cot(-68°13')$ Round to 7 decimal places.

d) $\dfrac{1}{\cot 31.2°}$ Round to 8 decimal places.

e) $\dfrac{\cos 64°}{\sin 64°}$ Round to 4 decimal places.

** When the _____ is unknown, we must use the _____ function.

Find a value of θ in the interval [0°,90°] that satisfies the given statement.

$\cos\theta = \frac{1}{2}$

*** $\csc\theta = 2$

Example 2:

(Simplify your answer. Type an integer or a decimal. Round to six decimal places if needed.)

a) $\sin\theta = 0.75629013$

b) $\sec\alpha = 1.2263156$

c) $\cot\beta = 5.9812654$