

QUIZ 2: CIRCLE TRIG, SPECIAL ANGLES AND RECIPROCAL FUNCTIONS

1. Find each value to 3 decimal places:

(a) $\sec 52^\circ =$ _____

(b) $\cot 158^\circ =$ _____

(c) $\csc\left(\frac{5\pi}{8}\right) =$ _____

(d) $\sec(-246^\circ) =$ _____

2. Solve for θ to the nearest degree ($0 \leq \theta < 90^\circ$)

(a) $\cot \theta = 0.638$

(b) $\csc \theta = 2.136$

$\theta =$ _____

$\theta =$ _____

3. Find the exact values for the primary trig ratios for each acute angle:

(a) $\csc \theta = \frac{7}{4}$

(b) $\cot \theta = \frac{x+1}{x-1}$

$\cos \theta =$ _____

$\sin \theta =$ _____

4. Find the exact value of each ratio:

(a) $\cos\left(\frac{\pi}{4}\right)$

(b) $\csc\left(\frac{\pi}{6}\right)$

(c) $\tan\left(\frac{\pi}{3}\right)$

(d) $\cot\left(\frac{3\pi}{4}\right)$

(e) $\sin\left(\frac{5\pi}{4}\right)$

(f) $\sec\left(\frac{-\pi}{3}\right)$

(g) $\tan\left(\frac{5\pi}{6}\right)$

(h) $\csc\left(\frac{11\pi}{6}\right)$

5. Solve x exactly, $0 < x < 2\pi$

(a) $\cos x = \frac{\sqrt{3}}{2}$

$x =$ _____

(b) $\sin x = \frac{1}{\sqrt{2}}$

$x =$ _____

(c) $\tan x = -\sqrt{3}$

$x =$ _____

(d) $\cos x = \frac{-1}{2}$

$x =$ _____

(e) $\cot x = 1$

$x =$ _____

(f) $\csc x = \frac{-2}{\sqrt{3}}$

$x =$ _____