# QUIZZES FOR 1020 COLLEGE ALGEBRA AND TRIGONOMETRY 

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Quiz 1
Draw an angle of 1 radian. Is this angle: acute, right, obtuse, straight?
Quiz 2
What is bigger: $\sin 45^{\circ}$ or $\cos \frac{\pi}{4}$ ?
Quiz 3
A wheel rotates with an angular speed $1 \mathrm{rad} / \mathrm{sec}$. How many rotations it makes in 1 minute?

Quiz 4
Is the following equality true: $\sin ^{2} \frac{\pi}{3}+\cos ^{2} \frac{\pi}{3}=\sin ^{2} \frac{2 \pi}{3}+\cos ^{2}\left(-\frac{2 \pi}{3}\right)$ ?
Quiz 5
Can the same function be both even and odd?
Quiz 6
Which of the following inequalities is true for all positive numbers $x$ :
(i) $2 \sin (x) \geq \sin (x)$;
(ii) $\sin (2 x) \geq \sin (x)$ ?

Quiz 7
Draw a graph of the function $y=2 \sin \left(x-\frac{\pi}{2}\right)$.
Quiz 8
(i) Find $x$ such that $\cos ^{-1}(x)=0$.
(ii) Find the exact value of $\sin ^{-1}(-2)$.

Quiz 9
Verify the identity:

$$
\frac{\cos (-x)}{\sin (-x)}=-\frac{1}{\tan (x)} .
$$

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