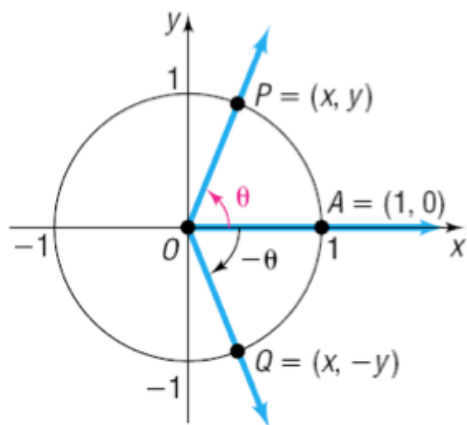


6 Use Even–Odd Properties to Find the Exact Values of the Trigonometric Functions

Even–Odd Properties

$\sin(-\theta) = -\sin \theta$	$\cos(-\theta) = \cos \theta$	$\tan(-\theta) = -\tan \theta$
$\csc(-\theta) = -\csc \theta$	$\sec(-\theta) = \sec \theta$	$\cot(-\theta) = -\cot \theta$



EXAMPLE**Finding Exact Values Using Even-Odd Properties**

Find the exact value of:

(a) $\cos(-60^\circ)$ (b) $\sin(-390^\circ)$ (c) $\tan\left(-\frac{37\pi}{4}\right)$

$$\cos 60^\circ \quad -\sin 390^\circ \quad -\tan \frac{37\pi}{4}$$

$$\cos \frac{\pi}{3} \quad -\sin 30^\circ \quad -\tan \frac{\pi}{4}$$

$$\frac{1}{2}$$

$$-\sin \frac{\pi}{6}$$

$$-\frac{1}{2}$$

$$-1$$