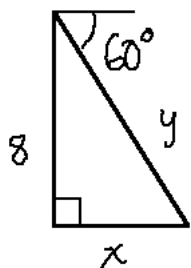


1. If $\tan \theta = \frac{3}{2}$ and $\sin \theta < 0$, find $\cos \theta$.
2. Simplify: $3 \tan\left(\frac{3\pi}{4}\right) - 2 \cot\left(-\frac{\pi}{4}\right)$.
3. What is the domain and the range of the secant function?
4. Is the function $f(x) = x + \sin x$ odd, even or neither?
5. The radius of each wheel of a car is 15 inches. If the wheels are turning at the rate of 3 revolutions per second, how fast is the car moving? Leave your answer in terms of π .
6. Find x and y .



7. Find the exact value of
 - (a) $\cot\left(\frac{7\pi}{6}\right)$
 - (b) $\sin(-330^\circ)$
 - (c) $\sec 135^\circ$
8. Sketch $f(x) = \tan\left(\frac{1}{2}x\right)$.
9. Sketch $f(x) = -2 \cos(3x - \pi)$.
10. Sketch $f(x) = \cot(4x + \pi)$.