

## EQUATION

$f(x) = \sin x$	$f(x) = \cos x$	$f(x) = \tan x$
$f(x) = \csc x$	$f(x) = \sec x$	$f(x) = \cot x$

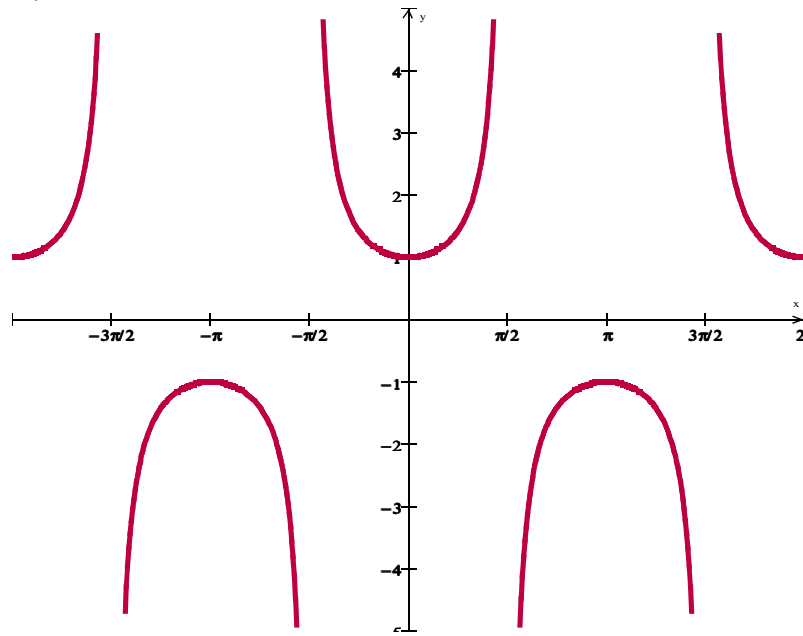
## DESCRIPTION

1. The graph of this function has amplitude 1 and period $2\pi$ . It is a shift of the cosine graph.	2. The graph of this function has vertical asymptotes when $\sin(x) = 0$ .	3. The graph of this function has vertical asymptotes when $\sin(x) = 0$ .
4. The graph of this function has vertical asymptotes when $\cos(x) = 0$ .	5. The graph of this function has amplitude 1 and period $2\pi$ . It is a shift of the sine graph.	6. The graph of this function has vertical asymptotes when $\cos(x) = 0$ .

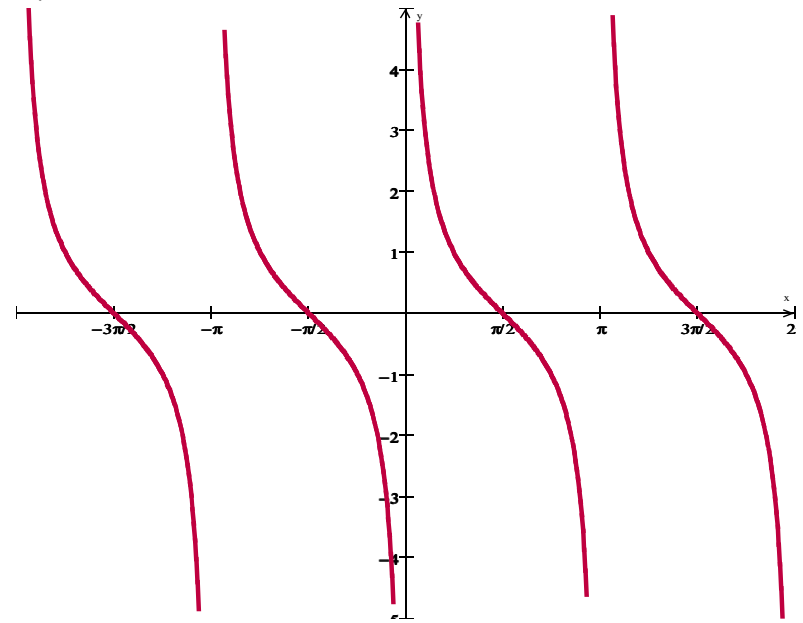
## PERIOD

$\pi$	$2\pi$	$2\pi$
$2\pi$	$2\pi$	$2\pi$

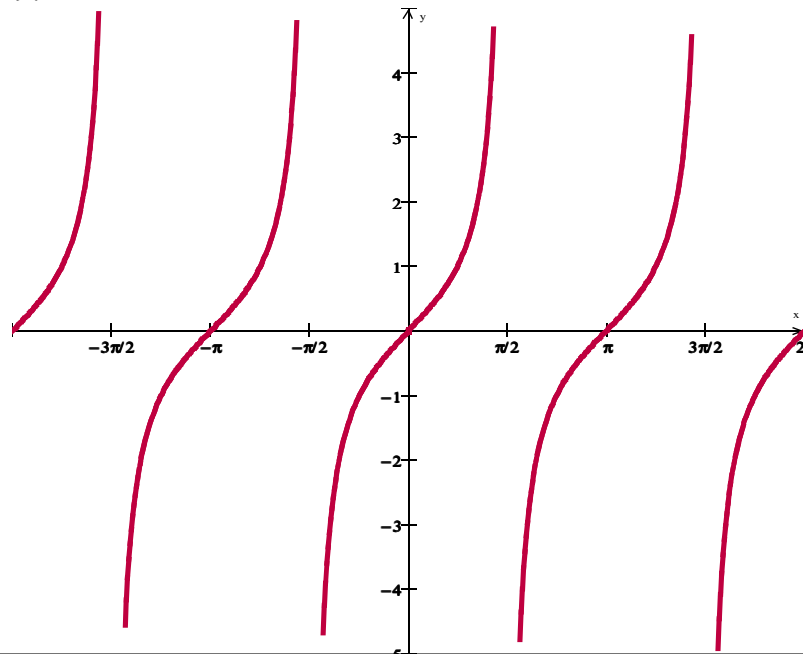
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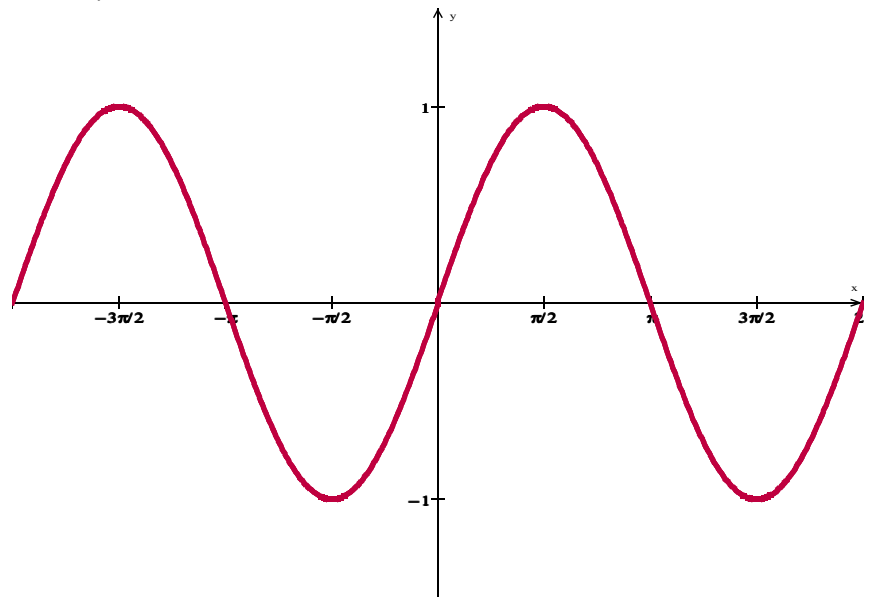
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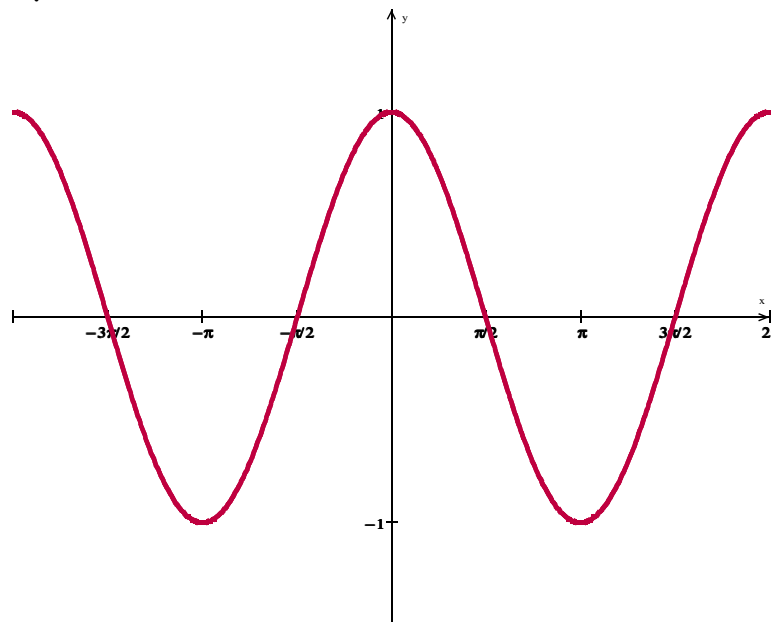
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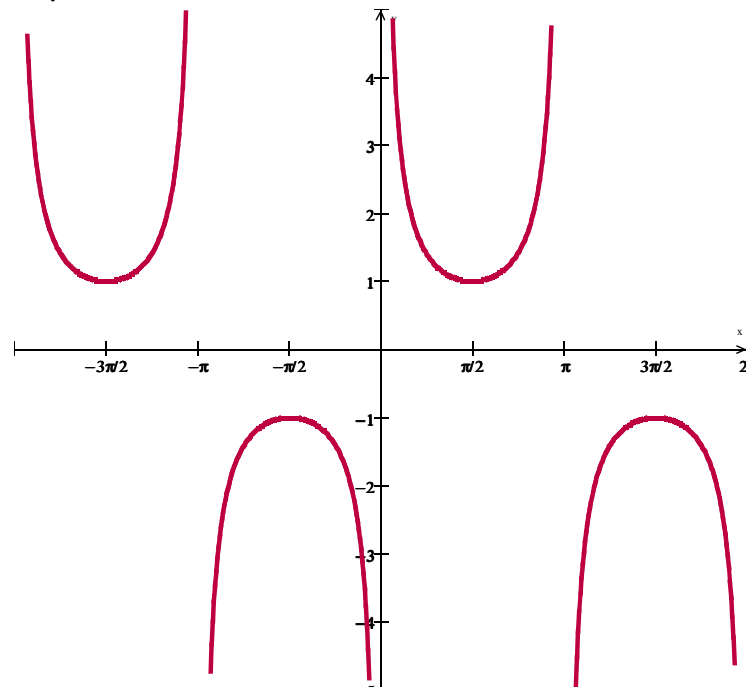
10.



11.



12.



EQUIVALENT TO:

$$f(x) = \frac{1}{\cos x}$$

$$f(x) = \frac{1}{\sin x}$$

$$f(x) = \frac{1}{\sec x}$$

$$f(x) = \frac{\sin x}{\cos x}$$

$$f(x) = \frac{\cos x}{\sin x}$$

$$f(x) = \frac{1}{\csc x}$$

# GRAPHS OF TRIGONOMETRIC FUNCTIONS

FUNCTION                      DOMAIN                      RANGE                      PERIOD

*Attach Graph here*

EQUIVALENT TO:
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Does this function have vertical asymptotes? If so what are they? Show or explain how you arrived at your answer.