

CUT & PASTE Activity

TRIGONOMETRIC FUNCTIONS

1

Function:

2

Function:

3

4

TRIGONOMETRIC *Functions*

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TRIGONOMETRIC FUNCTIONS

Cut & Paste Activity

Objective: To practice identifying a trigonometric function given its graph. This activity includes all six trigonometric functions: sine, cosine, tangent, cosecant, secant, and cotangent. Graphs 1-6 contain changes to period and amplitude only; graphs 7-12 include changes to period and amplitude, as well as translations (vertical and phase shifts).

Activity Directions: Give students both the graphs worksheet and the page with the functions. I like to print the graphs on colored paper and the functions on white paper. Students must determine the function that best represents the graph. There are four choices for each graph. They paste this function onto the graphs worksheet.

TRIGONOMETRIC FUNCTIONS

1

Function:

2

Function:

3

Function:

4

Function:

5

Function:

7

Function:

8

Function:

9

Function:

10

Function:

11

Function:

$f(x) = 5 \cdot \sin 2x$	$f(x) = \cot \frac{2}{3}x$	$f(x) = \frac{1}{2} \cdot \sec 2x$	$f(x) = \frac{7}{2} \cdot \cos 2x$
$f(x) = 5 \cdot \sin x$	$f(x) = \cot \frac{4}{3}x$	$f(x) = \frac{1}{2} \cdot \csc 2x$	$f(x) = \frac{7}{2} \cdot \cos \frac{1}{2}x$
$f(x) = 5 \cdot \cos 2x$	$f(x) = 2 \cdot \cot \frac{2}{3}x$	$f(x) = \frac{1}{2} \cdot \sec x$	$f(x) = \frac{7}{2} \cdot \sin 2x$
$f(x) = 5 \cdot \cos x$	$f(x) = 2 \cdot \cot \frac{4}{3}x$	$f(x) = \frac{1}{2} \cdot \csc x$	$f(x) = \frac{7}{2} \cdot \sin \frac{1}{2}x$
$f(x) = \frac{1}{2} \cdot \tan x$	$f(x) = 2 \cdot \sec \frac{8}{3}x$	$f(x) = \tan \frac{1}{2}(x - \pi) - 3$	$f(x) = \frac{1}{2} \cdot \sec 2\left(x + \frac{\pi}{2}\right) - 1$
$f(x) = \frac{1}{2} \cdot \tan 2x$	$f(x) = 2 \cdot \csc \frac{8}{3}x$	$f(x) = \tan \frac{1}{2}(x + \pi) - 3$	$f(x) = \frac{1}{2} \cdot \sec 2\left(x - \frac{\pi}{2}\right) - 1$
$f(x) = 2 \cdot \tan \frac{1}{2}x$	$f(x) = 2 \cdot \sec \frac{8}{5}x$	$f(x) = \tan 2\left(x - \frac{\pi}{2}\right) - 3$	$f(x) = \frac{1}{2} \cdot \sec \frac{1}{2}\left(x + \frac{\pi}{2}\right) - 1$
$f(x) = \tan \frac{1}{2}x$	$f(x) = 2 \cdot \csc \frac{8}{5}x$	$f(x) = \tan 2\left(x + \frac{\pi}{2}\right) - 3$	$f(x) = \frac{1}{2} \cdot \sec \frac{1}{2}\left(x - \frac{\pi}{2}\right) - 1$
$f(x) = 2 \cdot \cos \frac{2}{3}\left(x - \frac{\pi}{4}\right) + 4$	$f(x) = \csc \left(x - \frac{\pi}{2}\right) - 2$	$f(x) = 3 \cdot \cos \left(x + \frac{\pi}{2}\right) - 1$	$f(x) = 2 \cdot \cot 2\left(x - \frac{3\pi}{4}\right) + 2$
$f(x) = 2 \cdot \cos \frac{2}{3}\left(x + \frac{\pi}{4}\right) + 4$	$f(x) = \csc \left(x + \frac{\pi}{2}\right) - 2$	$f(x) = 3 \cdot \cos \left(x - \frac{\pi}{2}\right) - 1$	$f(x) = 2 \cdot \cot 2\left(x + \frac{3\pi}{4}\right) + 2$
$f(x) = 2 \cdot \sin \frac{2}{3}\left(x - \frac{\pi}{4}\right) + 4$	$f(x) = \csc (x - \pi) - 2$	$f(x) = 3 \cdot \cos \left(x + \frac{\pi}{2}\right) + 1$	$f(x) = 2 \cdot \cot 2\left(x - \frac{\pi}{4}\right) + 2$
$f(x) = 2 \cdot \sin \frac{2}{3}\left(x + \frac{\pi}{4}\right) + 4$	$f(x) = \csc (x + \pi) - 2$	$f(x) = 3 \cdot \cos \left(x - \frac{\pi}{2}\right) + 1$	$f(x) = 2 \cdot \cot 2\left(x + \frac{\pi}{4}\right) + 2$