

Trigonometry Worksheet: Graph Trigonometric Functions (4)

Graph the trigonometric function given by

$$y = -3\sin\left(x - \frac{3\pi}{4}\right) + 1$$

Since the period of the sine function is 2π , one cycle is found by solving

$$0 \leq x - \frac{3\pi}{4} \leq 2\pi$$

$$\Rightarrow \frac{3\pi}{4} \leq x \leq \frac{11\pi}{4}$$

$x - \frac{3\pi}{4}$	0	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$	2π
$\sin\left(x - \frac{3\pi}{4}\right)$	0	1	0	-1	0
x	$\frac{3\pi}{4}$	$\frac{5\pi}{4}$	$\frac{7\pi}{4}$	$\frac{9\pi}{4}$	$\frac{11\pi}{4}$
y	+1	-2	+1	4	+1

