

Graph each trigonometric function. Then state the domain, range, amplitude, and period.

1.  $y = \csc x$

Domain:  
Range:  
Amplitude:  
Period:

2.  $y = -\frac{1}{2} \sin(2x)$

Domain:  
Range:  
Amplitude:  
Period:

3.  $y = 5 \cos\left(\frac{1}{4}\theta\right)$

Domain:  
Range:  
Amplitude:  
Period:

4.  $y = 3 \cot(2\theta)$

Domain:  
Range:  
Amplitude:  
Period:

Give the equation of each trigonometric function with the following characteristics.

1.  $y = \sin x$ , the graph has a period of  $\frac{\pi}{2}$  and an amplitude of 4.

2.  $y = \cos x$ , the graph has a period of  $6\pi$  and an amplitude of  $\frac{1}{3}$ .

3.  $y = \tan \theta$ , the graph has a period of  $90^\circ$ .

4.  $y = \cot \theta$ , the graph has a period of  $360^\circ$ .

5.  $y = \sin x$ , the graph has a period of  $\pi$  and an amplitude of  $\frac{1}{2}$ .

6.  $y = \csc \theta$ , the graph has a period of  $60^\circ$  and the corresponding sine function has an amplitude of 5.