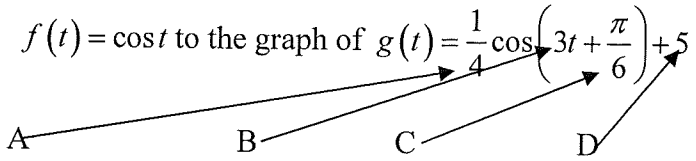
PreCalculus
7.3-7.4 Partner Test 2014

Names _____

1. Describe the transformations that change the graph of $f(t)=\cos t$ to the graph of $g(t)=\frac{1}{4}\cos\left(3t+\frac{\pi}{6}\right)+5$.



1. A_____

B_____

C_____

D_____

2. Write an equation for the sine function that is stretched vertically by a factor of 3, has a period of $\frac{\pi}{4}$, is reflected over the x-axis and a phase shift of $\frac{\pi}{3}$ to the left.

2._____

3. Graph **one full period** of the function $f(t)=3\cos\left(\frac{1}{2}t+\pi\right)+2$

Label both x and y axis completely

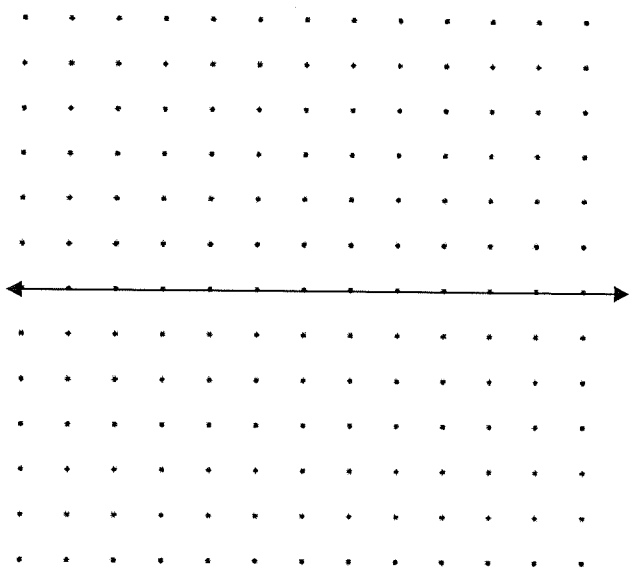
Amplitude: _____

Period: _____

Increments: _____

Phase Shift: _____

Vertical Shift_____



4. Graph **one full period** of the function $f(t)=-\csc(2t-\pi)$.

Label both x and y axis completely

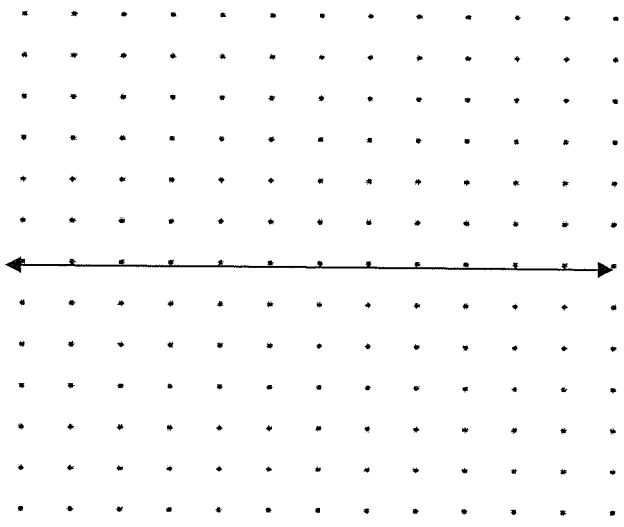
Amplitude: _____

Period: _____

Increments: _____

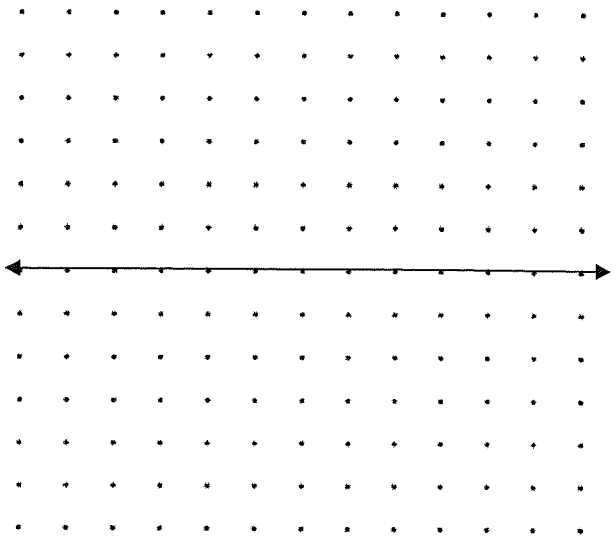
Phase Shift: _____

Vertical Shift: _____



5. Graph **two full periods** of the function $f(t) = 2\tan\left(4t + \frac{\pi}{6}\right) - 1$.

Label both x and y axis completely



Steepness: _____

Period: _____

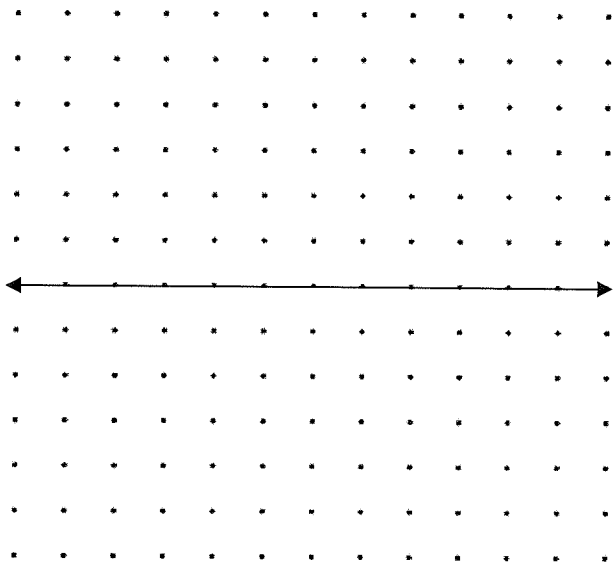
Increments: _____

V. Shift: _____

1st Asymptote: _____

6. Graph **two full periods** of the function $f(t) = \cot\left(4t + \frac{\pi}{3}\right) + 2$.

Label both x and y axis completely



Steepness: _____

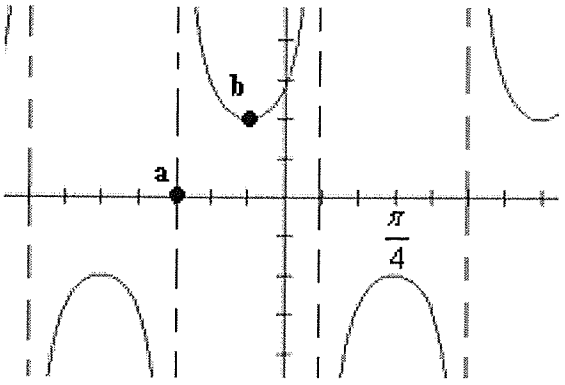
Period: _____

Increments: _____

V. Shift: _____

1st Asymptote: _____

Write **two** equations using **different** trig functions that could be the rule for the graph shown.

7. 

a. _____

b. _____