

PreAP PreCalculus
WS: Graphs of Trig Functions
Spring 2019

Name _____

Date _____ Per _____

For the following functions, state the amplitude, period, phase shift vertical shift, and sketch one period of the function.

1. $y = 2 \cos 3x - 1$
2. $y = 3 \sin\left(x - \frac{\pi}{4}\right) + 1$
3. $y = -2 \cos\left(x + \frac{\pi}{3}\right) - 1$
4. $y = \frac{3}{4} \sin(2x) - 1$
5. $y = 1.5 \sin 0.5\left(x - \frac{\pi}{4}\right) + 1$

For the following functions, state the period, phase shift, and vertical shift and sketch two periods of the function.

6. $y = \tan\left(x - \frac{\pi}{6}\right) - 2$
7. $y = \cot 2\left(x + \frac{\pi}{3}\right) + 1$
8. $y = 2 \csc\left(\frac{1}{2}x - \frac{\pi}{4}\right) + 1$

1. Amp _____
 Period _____
 Phase Shift _____
 Vertical Shift _____
2. Amp _____
 Period _____
 Phase Shift _____
 Vertical Shift _____

3. Amp _____
 Period _____
 Phase Shift _____
 Vertical Shift _____
4. Amp _____
 Period _____
 Phase Shift _____
 Vertical Shift _____
5. Amp _____
 Period _____
 Phase Shift _____
 Vertical Shift _____
6. Per _____ PS _____
 Vertical Shift _____
7. Per _____ PS _____
 Vertical Shift _____
8. Per _____ PS _____
 Vertical Shift _____