

HW Graphing Trig Functions

Name: key
 Period: Date:

Complete the following table:

FUNCTION	AMPLITUDE	PERIOD	VERTICAL SHIFT	HORIZONTAL SHIFT
1. $y = -2\sin(x)$	2	2π	none	none
2. $y = 3\cos(x + \frac{\pi}{2})$	3	2π	none	left $\frac{\pi}{2}$
3. $y = 4 + \tan(x)$	none	π	up 4	none
4. $y = -\frac{1}{3}\sin(x - \pi)$	$\frac{1}{3}$	2π	none	right π
5. $y = -\sin(\frac{1}{2}x - \frac{\pi}{2})$ $y = -\sin(\frac{1}{2}(x - \pi))$	1	4π	none	right π
6. $y = \cot(x + \frac{\pi}{2})$	none	π	none	left $\frac{\pi}{2}$
7. $y = 2 - 3\sin(x - 2)$ $y = -3\sin(x - 2) + 2$	3	2π	up 2	right 2
8. $y = -3\cos(2x)$	3	π	none	none
9. $y = \csc(x + 2) - 5$	none	2π	down 5	left 2
10. $y = -2 + \tan(x - 3)$ $y = \tan(x - 3) - 2$	none	π	right 3	down 2

In general:

11. The following graphs have a standard period of π : $\tan(x), \cot(x)$.

12. The following graphs have a standard period of 2π : $\sin(x), \cos(x), \csc(x), \sec(x)$

13. Which of the trig graphs have amplitude? $\sin(x), \cos(x)$.

14. Which of the trig graphs don't have an amplitude? $\tan(x), \cot(x), \csc(x), \sec(x)$

1. Which of the trig graphs have asymptotes? $\tan(x), \cot(x), \csc(x), \sec(x)$.