Student: Cole Lamers **Date:** 07/27/19	**Instructor:** Kelly Galarneau **Course:** CA&T Internet (70263) Galarneau	**Assignment:** 5.5 Graphs of the Other Trig Functions

1. Complete the following statement.

The tangent function has period _____.

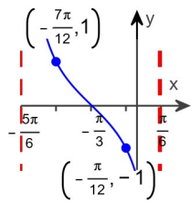
The tangent function has period π. (Type an exact answer, using π as needed.)

2. Graph the function over a one-period interval.

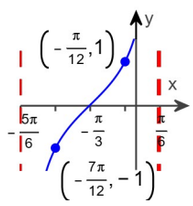
$y = \tan\left(x + \frac{\pi}{3}\right)$

Which graph below shows one period of the function?

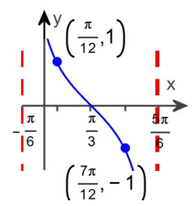
A.



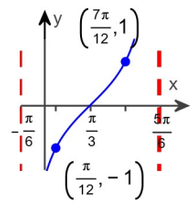
B. ✔



C.



D.

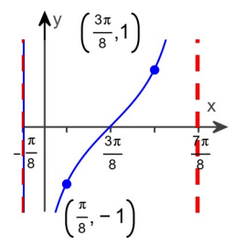


3. Graph the function over a one-period interval.

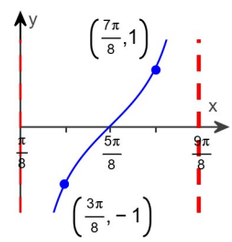
$y = \cot\left(x - \frac{\pi}{8}\right)$

Which graph below shows one period of the function?

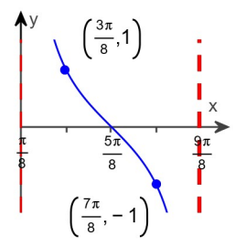
A.



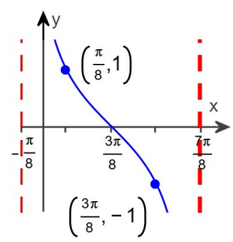
B.



C. ✔



D.

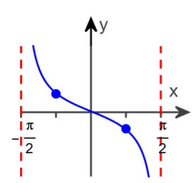


4. Graph the following function over a one-period interval.

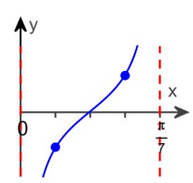
$y = -7\cot x$

Choose the correct graph below.

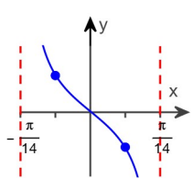
A.



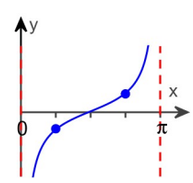
B.



C.



D. ✔

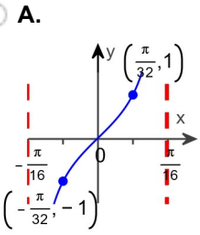


5. Graph the function over a one-period interval.

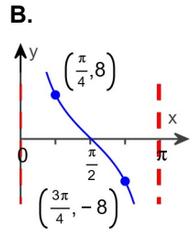
$y = 8\tan x$

Which graph below shows one period of the function?

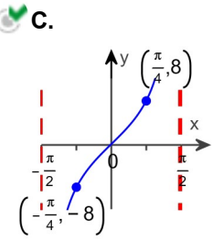
A.



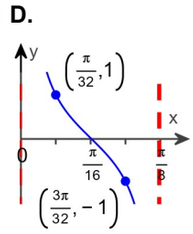
B.



C. ✔



D.

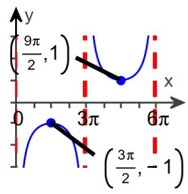


6. Graph the function over a one-period interval.

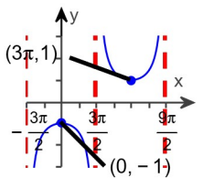
$$y = \sec \frac{x}{3}$$

Which graph below shows one period of the function?

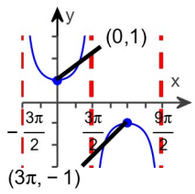
A.



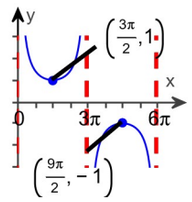
B.



C.



D.

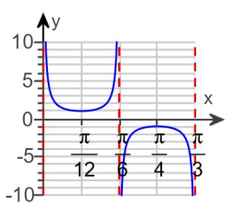


7. Graph the function over a one-period interval.

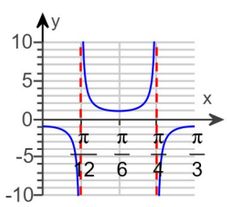
$$y = \sec 6x$$

Choose the correct graph below.

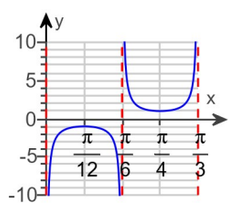
A.



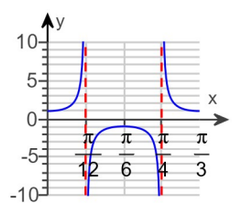
B.



C.

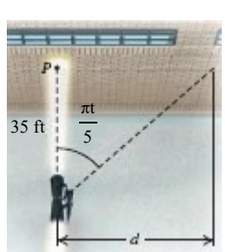


D.



8. A dual-beam rotating light on a movie set is positioned as a spotlight shining on a prison wall. The light is 35 feet from the wall and rotates clockwise. The light shines on point P on the wall when first turned on (t = 0). After t seconds, the distance (in feet) from the beam on the wall to the point P is given by the function shown below.

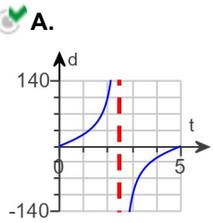
$$d(t) = 35 \tan \frac{\pi t}{5}$$



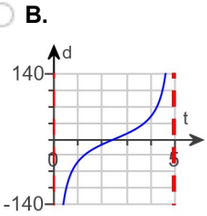
a. When the lightbeam is to the right of P, the value of d is positive, and when the beam is to the left of P, the value of d is negative. Graph d over the interval $0 \le t \le 5$.

Choose the correct graph below.

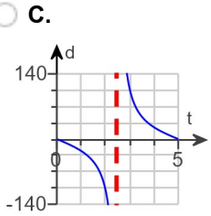
A.



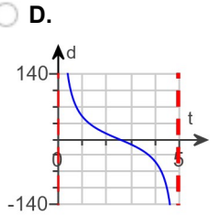
B.



C.



D.



b. Since d(t) is undefined for t = 2.5, where is the rotating light pointing when t = 2.5?

A. The beam from the rotating light is pointing at the left edge of the wall.
B. The beam from the rotating light is pointing parallel to the wall.
C. The beam from the rotating light is pointing at the point P on the wall.
D. The beam from the rotating light is pointing at the right edge of the wall.

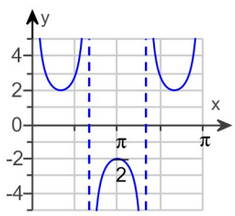
9. Watch the video and then solve the problem given below.

Click here to watch the video.[1]

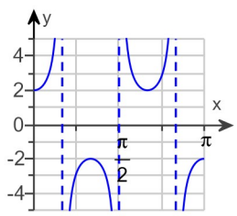
Graph y = 2 **sec** (3x) over the interval [0,π].

Choose the correct answer below.

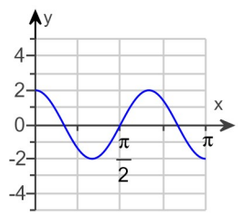
A.



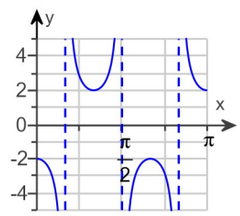
B.



C.



D.



1: http://mediaplayer.pearsoncmg.com/assets/TyGO7T2fd8jItPgTFtcV8ywoF37nvWdK?clip=4