

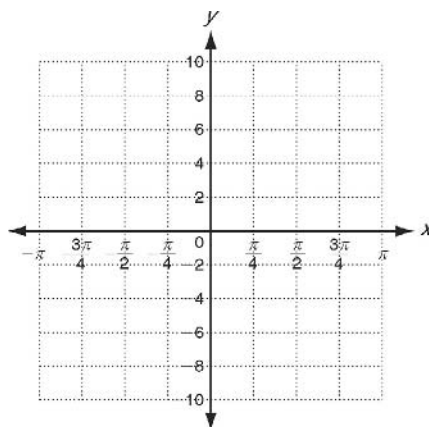
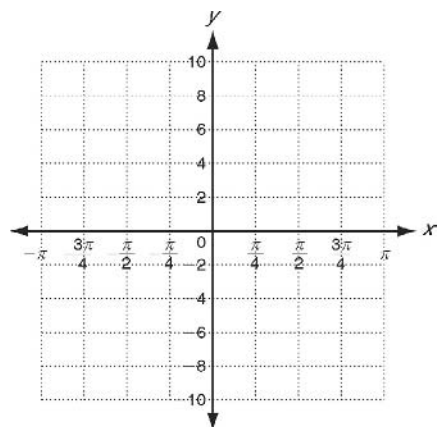
LESSON
11-2

Practice B
Graphs of Other Trigonometric Functions

Using $f(x) = \tan x$ and $f(x) = \cot x$ as a guide, graph each function. Identify the period, x -intercepts, and asymptotes.

1. $g(x) = 2 \tan \frac{\pi x}{2}$

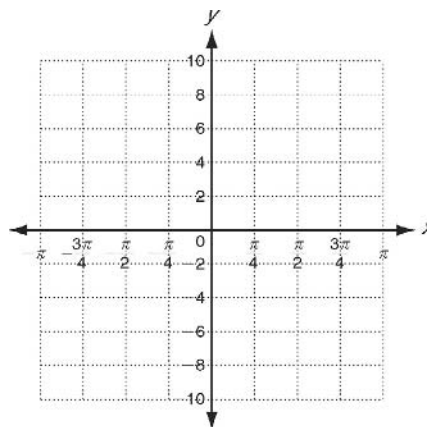
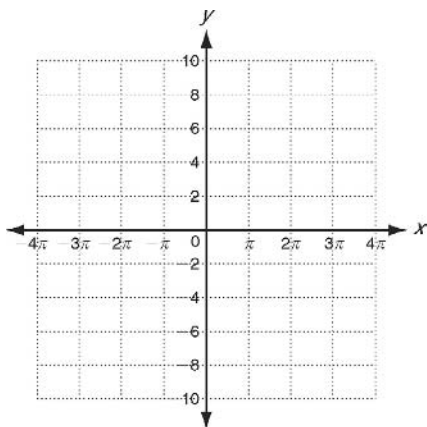
2. $t(x) = \frac{3}{4} \cot(x)$



Using $f(x) = \cos x$ or $f(x) = \sin x$ as a guide, graph each function. Identify the period and asymptotes.

3. $k(x) = \sec \frac{x}{2}$

4. $q(x) = \frac{1}{2} \csc(2x)$



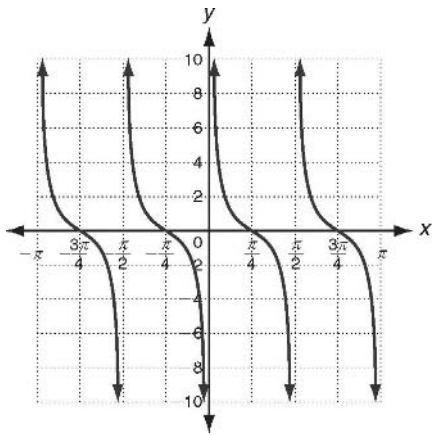
Solve.

5. The rotating light on a lighthouse is 400 feet from a cliff and completes one full rotation every 10 seconds. The equation representing the distance, a , in feet that the center of the circle of light is from the lighthouse is $a(t) = 400 \sec\left(\frac{\pi t}{5}\right)$.

- a. What is the period of $a(t)$? _____
- b. Find the value of the function at $t = 10$. _____

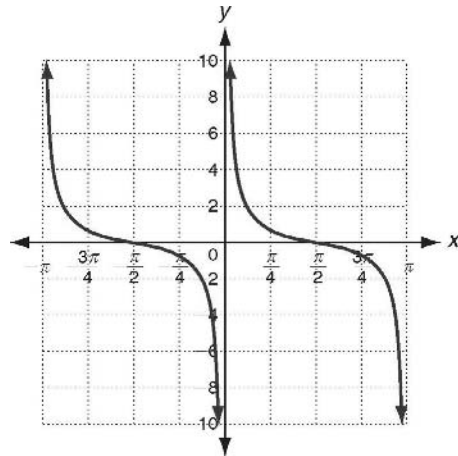
5. Period: $\frac{\pi}{2}$; x-intercepts: $\frac{\pi}{4} + \frac{\pi n}{2}$;

asymptotes: $\frac{\pi n}{2}$



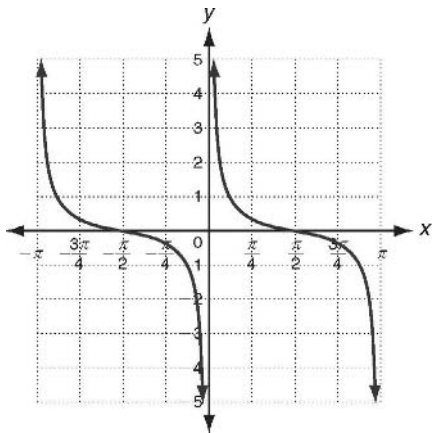
2. Period: π , x-intercepts: $\frac{\pi}{2} + \pi n$;

asymptotes: πn

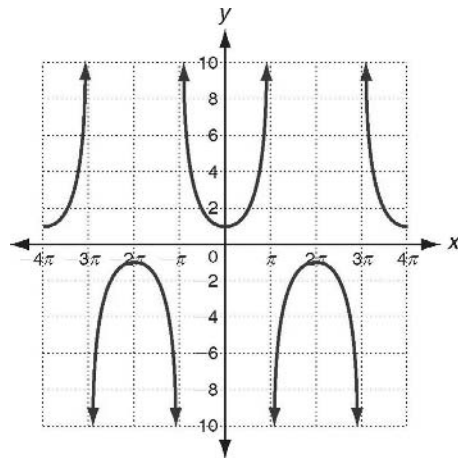


6. Period: π , x-intercepts: $\frac{\pi}{2} + \pi n$;

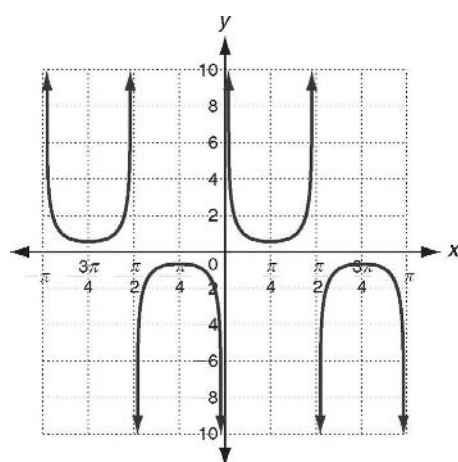
asymptotes: πn



3. Period: 4π , asymptotes: $\pi + 2\pi n$

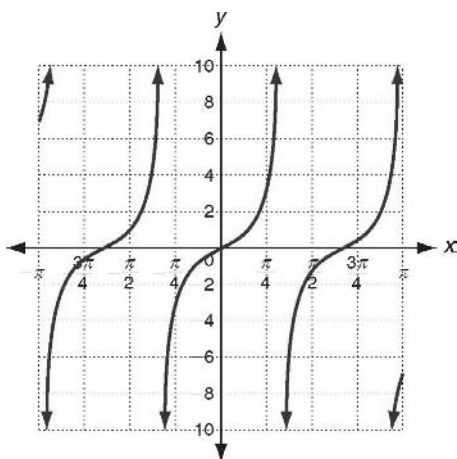


4. Period: π , asymptotes: $\frac{\pi n}{2}$



Practice B

1. asymptotes: $1 + 2n$ Period: 2; x-intercepts: $2n$;



5. a. 10
b. 400 ft