7-5 Additional Practice

Graphing Other Trigonometric Functions

Sketch the graph over the region -2π to 2π. Describe the domain, range, period, zeros and asymptotes of the function.

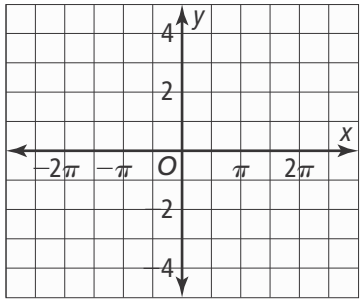
1. $y = \tan x$

Domain: _____

Range: _____

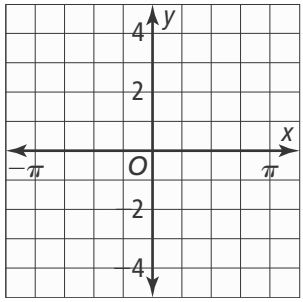
Period: _____

Asymptotes: _____

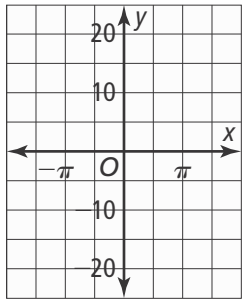


For Items 2 and 3, sketch the graphs of the functions. Then describe how the graph of each function compares to the graph of the parent function.

2. $y = \frac{1}{4}\tan 4x$



3. $y = 2 \cot 0.25x$



4. Benjamin is observing a hotel's entrance from a bench 30 ft away.

a. Write a function to model the height h of the hotel as a function of the angle of inclination x from his position to the entrance of the hotel.

b. Identify an appropriate domain.

5. Write a csc function that has a period of $\frac{\pi}{4}$.

6. Graph the function $y = \sec x$. Describe how the graph of $y = \sec x$ is related to the graph of $y = \cos x$.