

Graphs of the Tangent,  
Cotangent, and Secant Functions

1. Graph each function. Be sure to label key points and show at least two cycles. Use the graph to determine the domain and the range of each function  
(Similar to p.160 #17-40)

$$y = 2 \tan\left(\frac{1}{4}x\right)$$

2. Graph each function. Be sure to label key points and show at least two cycles. Use the graph to determine the domain and the range of each function  
(Similar to p.160 #17-40)

$$y = 3 \cot\left(\frac{\pi}{2}x\right)$$

3. Graph each function. Be sure to label key points and show at least two cycles. Use the graph to determine the domain and the range of each function  
(Similar to p.160 #17-40)

$$y = 5 \csc(4x)$$

4. Graph each function. Be sure to label key points and show at least two cycles. Use the graph to determine the domain and the range of each function  
(Similar to p.160 #17-40)

$$y = -2 \sec(\pi x)$$

5. Graph each function. Be sure to label key points and show at least two cycles. Use the graph to determine the domain and the range of each function  
(Similar to p.160 #17-40)

$$y = 3 \csc(4x) - 2$$