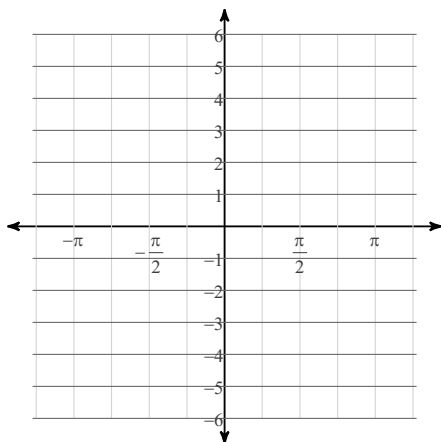


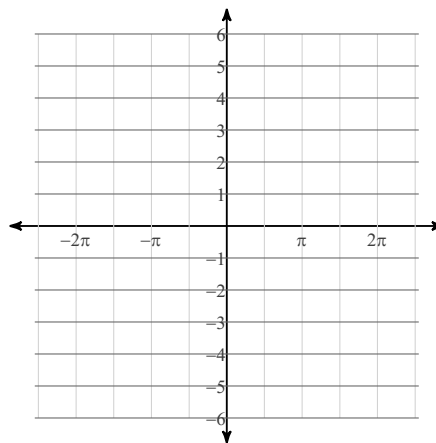
Graphing Cotangent

Find the amplitude, the period in radians, the phase shift in radians, and the vertical shift. Then sketch the graph using radians.

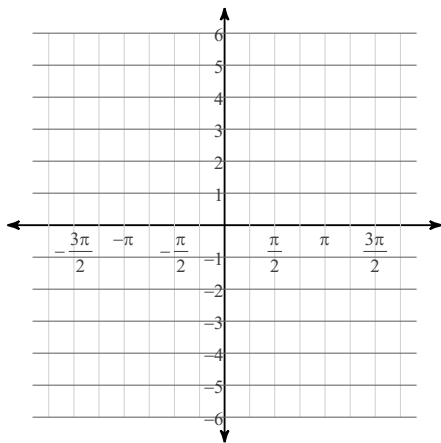
1) $y = \cot 2\theta$



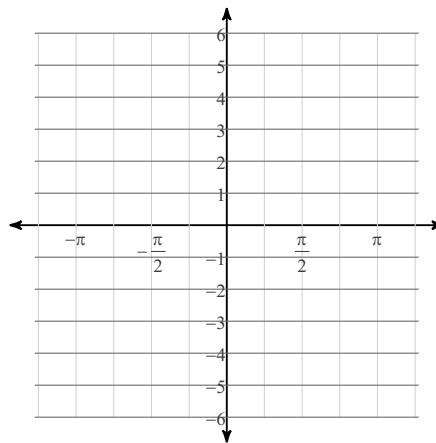
2) $y = \cot \frac{\theta}{3} - 2$



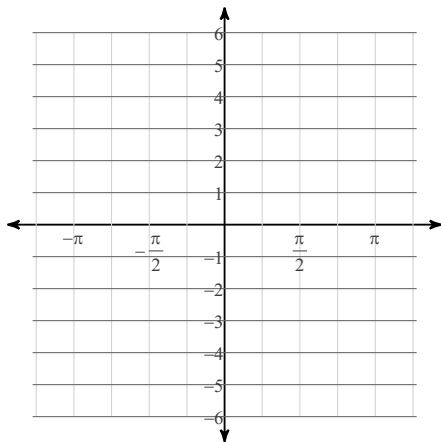
3) $y = \cot \frac{\theta}{2} + 2$



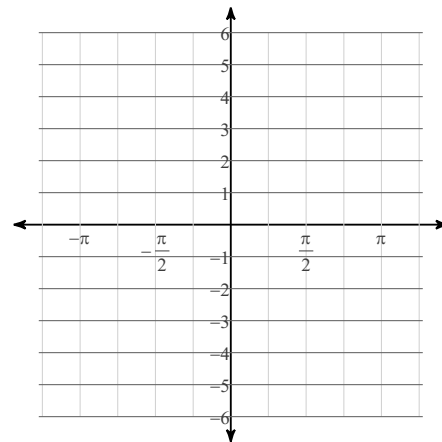
4) $y = \cot \left(\theta + \frac{\pi}{3} \right) + 2$



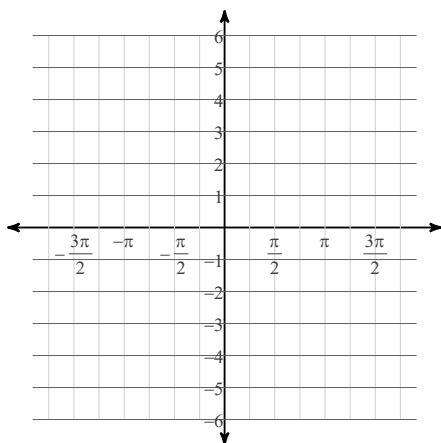
$$5) y = \cot\left(\theta - \frac{\pi}{4}\right) - 1$$



$$6) y = \cot\left(\theta - \frac{\pi}{2}\right)$$

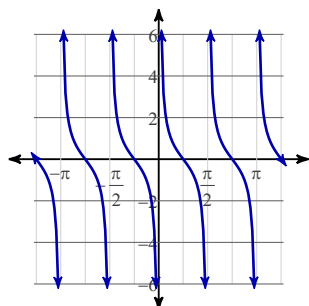


$$7) y = \cot\left(\frac{\theta}{2} + \frac{\pi}{4}\right) + 2$$



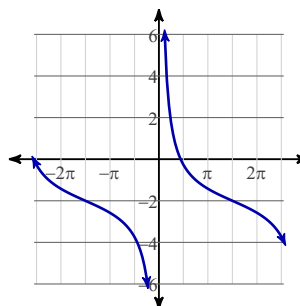
Answers to Graphing Cotangent

1)



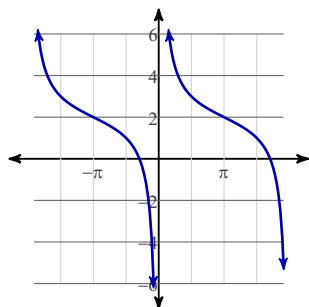
Amplitude: None
 Period: $\frac{\pi}{2}$
 Phase shift: None
 Vert. shift: None

2)



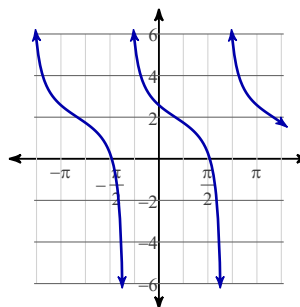
Amplitude: None
 Period: 3π
 Phase shift: None
 Vert. shift: Down 2

3)



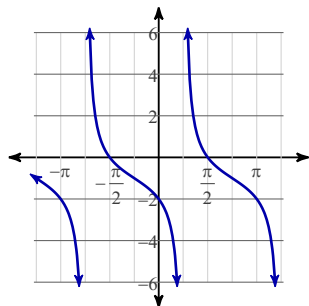
Amplitude: None
 Period: 2π
 Phase shift: None
 Vert. shift: Up 2

4)



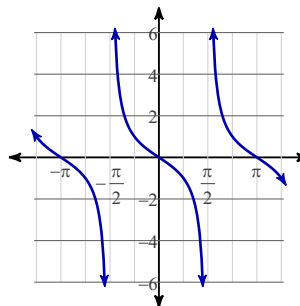
Amplitude: None
 Period: π
 Phase shift: Left $\frac{\pi}{3}$
 Vert. shift: Up 2

5)



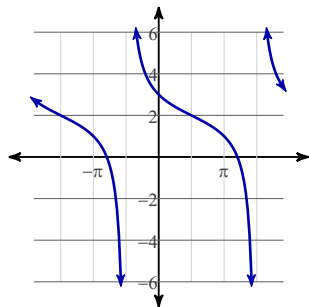
Amplitude: None
 Period: π
 Phase shift: Right $\frac{\pi}{4}$
 Vert. shift: Down 1

6)



Amplitude: None
 Period: π
 Phase shift: Right $\frac{\pi}{2}$
 Vert. shift: None

7)



Amplitude: None
 Period: 2π
 Phase shift: Left $\frac{\pi}{2}$
 Vert. shift: Up 2