

**Graphing Secant and Cosecant**

Graph each function. State the amplitude, period, phase shift, vertical shift, asymptotes, domain, and range.

1.  $y = 3\csc(3\theta + \pi) + 2$

2.  $y = -\csc(\theta + \pi)$

3.  $f(\theta) = 3\sec\left(\frac{\theta}{2} - \frac{\pi}{3}\right) - 2$

4.  $y = 2 - \sec\left(\theta - \frac{\pi}{4}\right)$

5.  $f(x) = -1 + 2 \csc\left(2x - \frac{2\pi}{3}\right)$

6.  $y = \frac{1}{2} \sec\left(\frac{x}{3} + 4\pi\right)$