

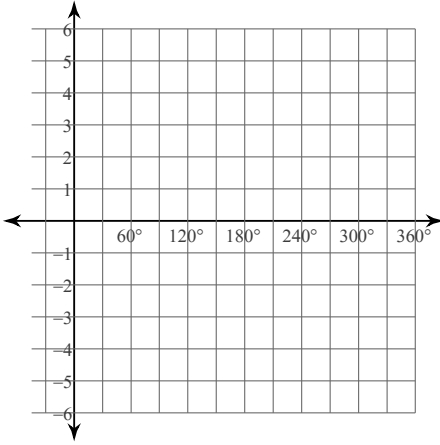
## Graphing Trig Functions

### Phase Shift and Vertical Shift

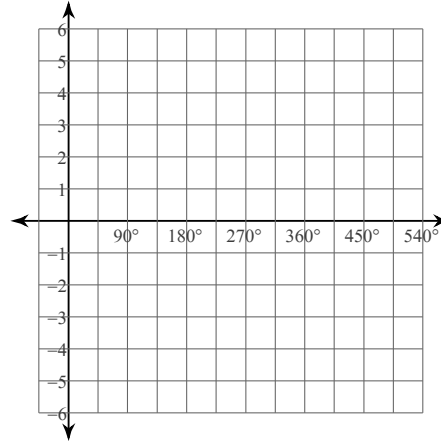
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**Graph each function using degrees.**

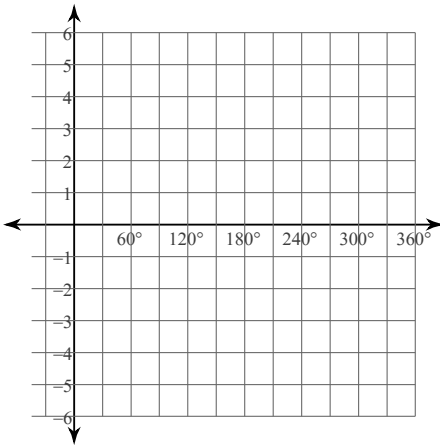
1)  $y = 2 + \tan(\theta + 135)$



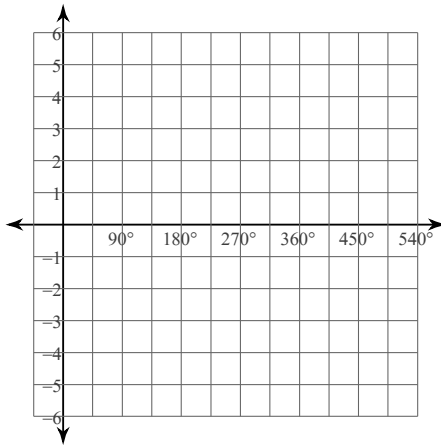
2)  $y = 1 + \sin(\theta + 135)$



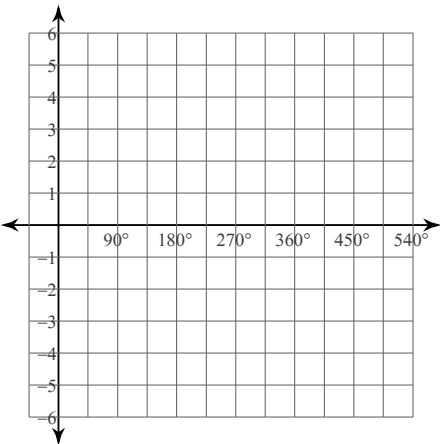
3)  $y = \tan(\theta + 120) - 2$



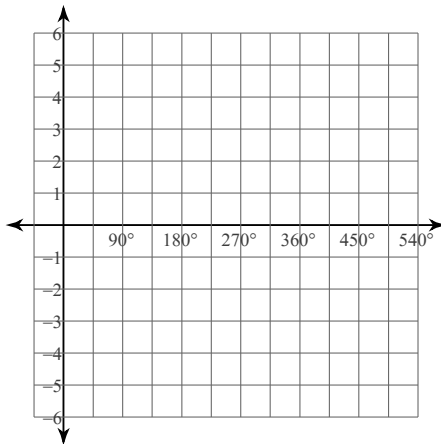
4)  $y = -2 + \cos(\theta + 150)$



5)  $y = \cos(\theta + 60) + 1$

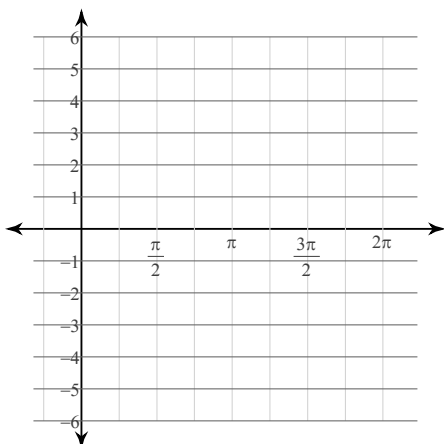


6)  $y = \cos(\theta + 60) + 2$

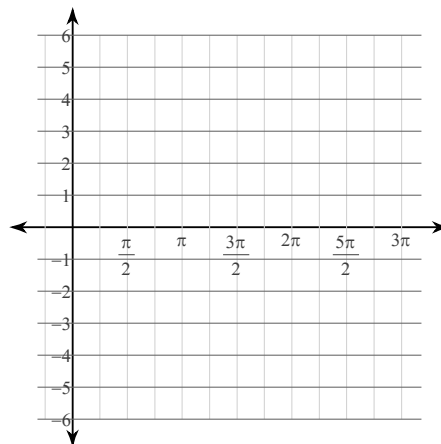


Using radians, find the amplitude and period of each function. Then graph.

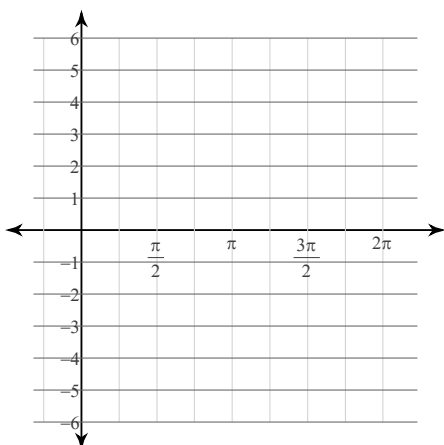
7)  $y = \tan\left(\theta - \frac{3\pi}{4}\right) + 2$



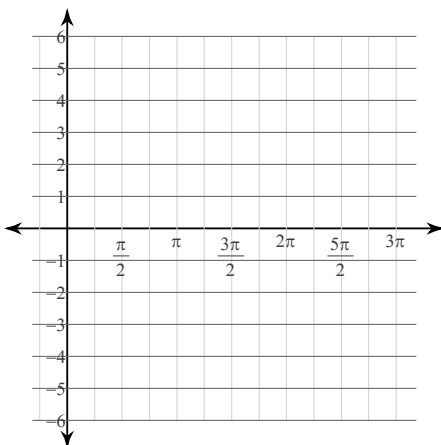
8)  $y = \sin \theta - 1$



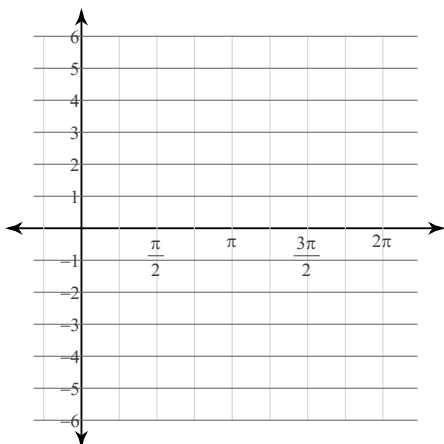
9)  $y = \tan\left(\theta - \frac{11\pi}{6}\right) - 2$



10)  $y = -2 + \cos \theta$



11)  $y = 2 + \tan\left(\theta + \frac{5\pi}{4}\right)$



12)  $y = 2 + \sin\left(\theta + \frac{5\pi}{4}\right)$

