Honors Precalculus
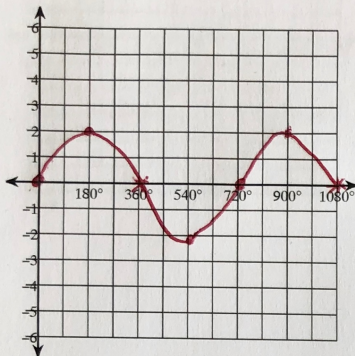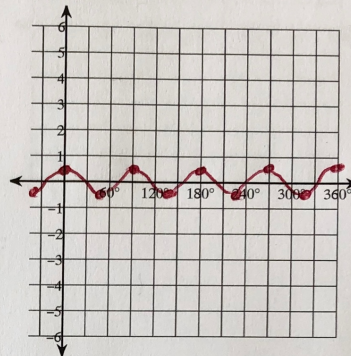
Name **Key**

Unit 2 Review

Date_____ Period____

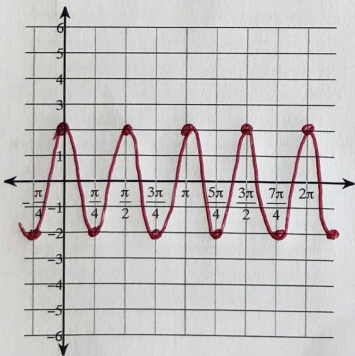**Find the amplitude and the period. Then sketch the graph.**

1) $y = 2\sin\dfrac{\theta}{2}$ AMP = 2
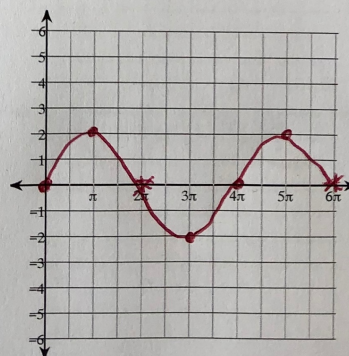   PER = 720°

2) $y = \dfrac{1}{2} \cdot \cos 4\theta$ AMP = ½
   PER = 90°
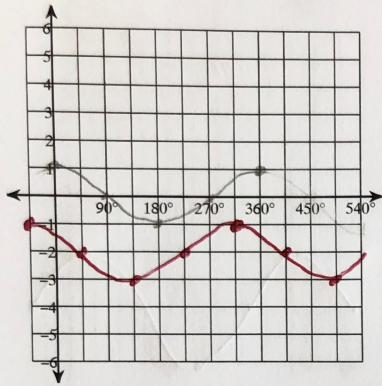

3) $y = 2\cos 4\theta$ AMP = 2
   PER = $\pi/2$

4) $y = 2\sin\dfrac{\theta}{2}$ AMP = 2
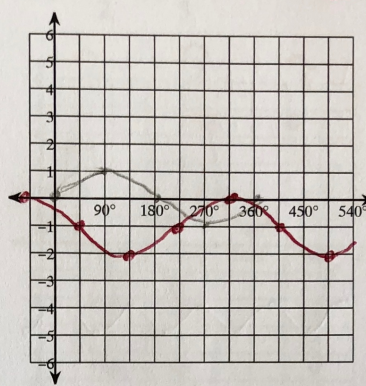   PER = 4π

-1-

Find the phase shift and the vertical shift. Then sketch the graph.
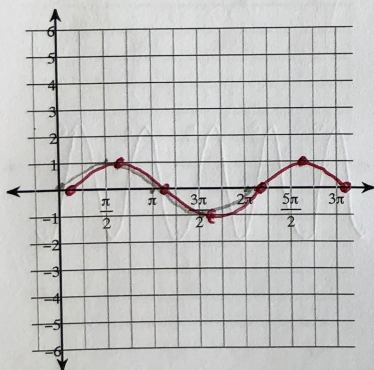
5) $y = \cos(\theta + 45) - 2$ LEFT 45° (1)
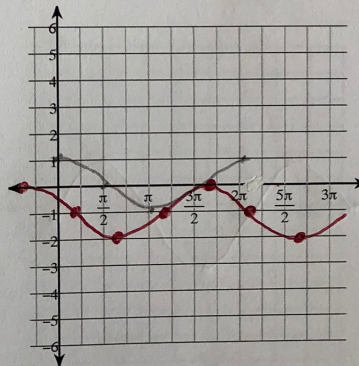   DOWN 2

6) $y = \sin(\theta + 120) - 1$ LEFT 120° (3)
                                   DOWN 1

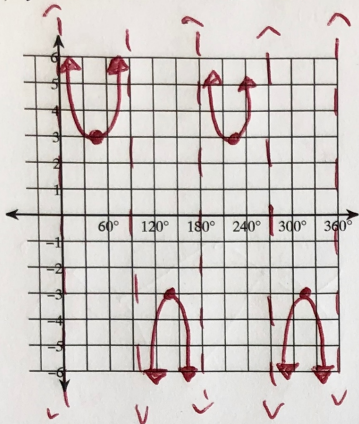7) $y = \sin\left(\theta - \dfrac{\pi}{6}\right)$ RIGHT $^\pi/_6$ (.6)

8) $y = \cos\left(\theta + \dfrac{\pi}{3}\right) - 1$ LEFT $^\pi/_3$ (1.3̄)
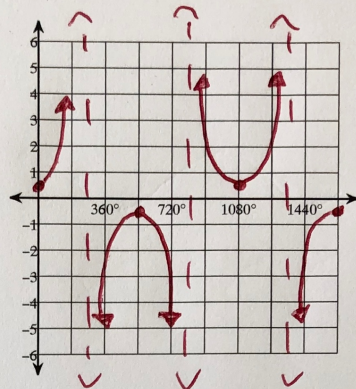   DOWN 1

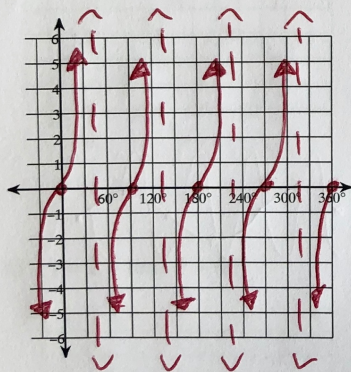**Find the period. Then sketch the graph.**

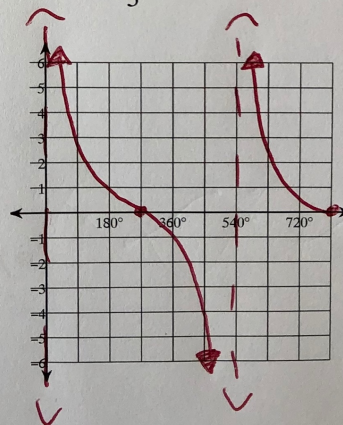9) $y = 3\csc 2\theta$ PERIOD $= 180°$

10) $y = \dfrac{1}{2} \cdot \sec \dfrac{\theta}{3}$ PERIOD $= 1080°$

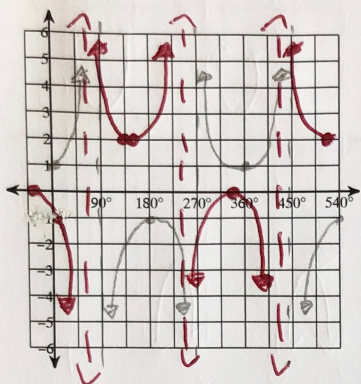
11) $y = 3\tan 2\theta$ PERIOD $= 90°$

12) $y = \cot \dfrac{\theta}{3}$ PERIOD $= 540°$

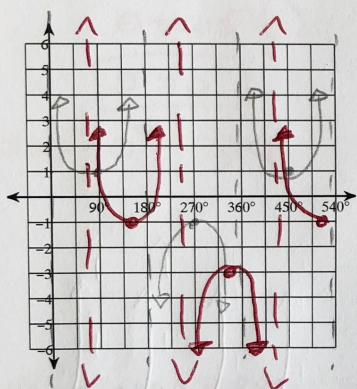**Find the phase shift and the vertical shift. Then sketch the graph.**

13) $y = \sec(\theta - 150) + 1$

RIGHT $150°$ $(3.\overline{3})$
UP 1

14) $y = \csc(\theta - 60) - 2$

RIGHT $60°$ $(1.\overline{3})$
DOWN 2

15) $y = 2 + \tan(\theta - 60)$

RIGHT $60°$ (2)
UP 2