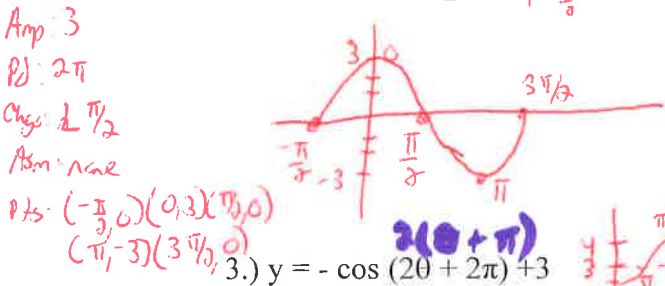


Name: Key Date: _____

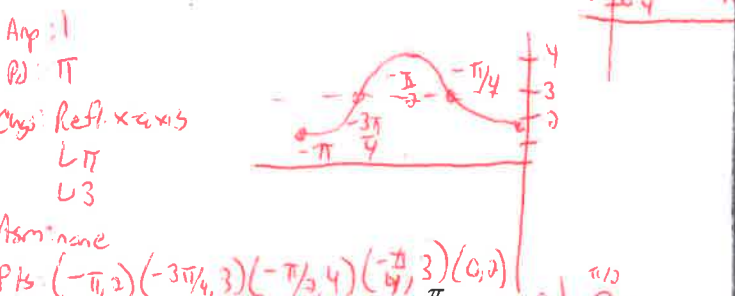
CHAPTER 4(b) REVIEW

Graph the following trig functions from $0-2\pi$ or one full period. Label the changes, period, amplitude, asymptotes and key points.

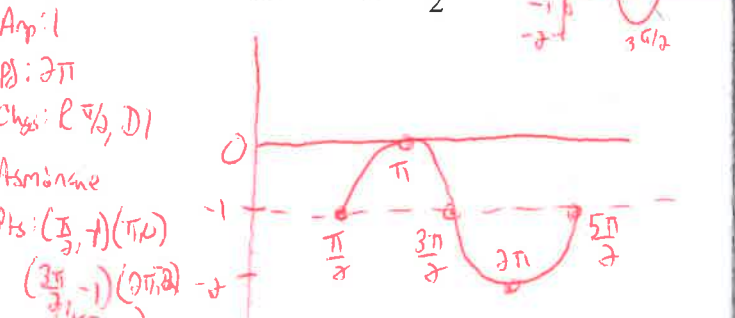
1.) $y = 3\sin(\theta + \frac{\pi}{2})$



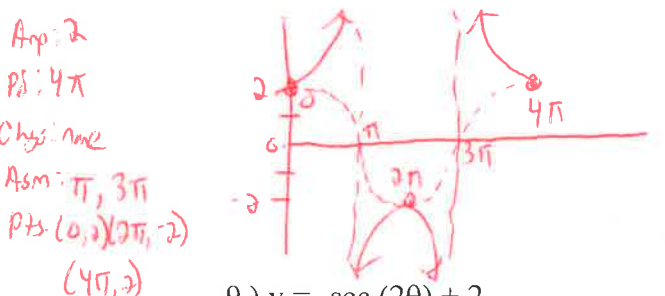
3.) $y = -\cos(2\theta + 2\pi) + 3$



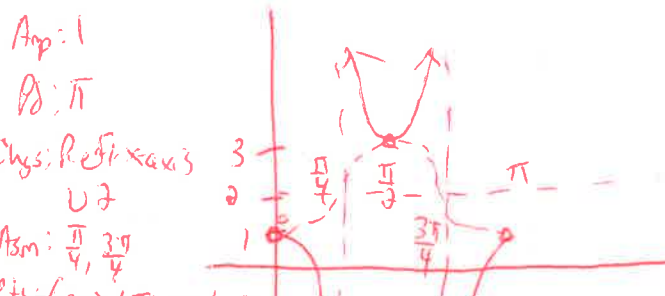
5.) $y = \sin(\theta - \frac{\pi}{2}) - 1$



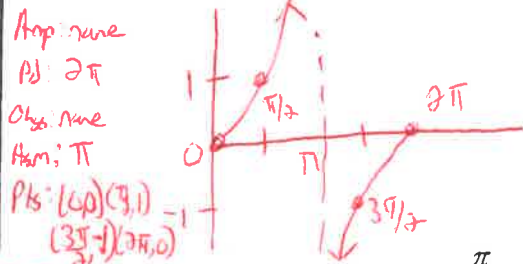
7.) $y = 2\sec(\frac{1}{2}\theta)$



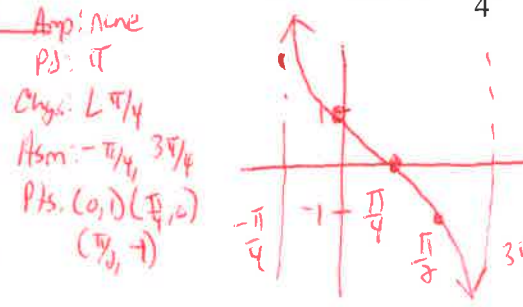
9.) $y = -\sec(2\theta) + 2$



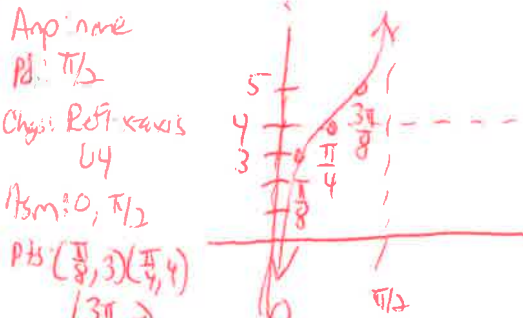
2.) $y = \tan(\frac{1}{2}\theta)$



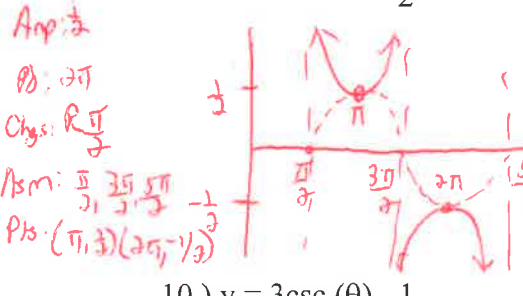
4.) $y = \cot(\theta + \frac{\pi}{4})$



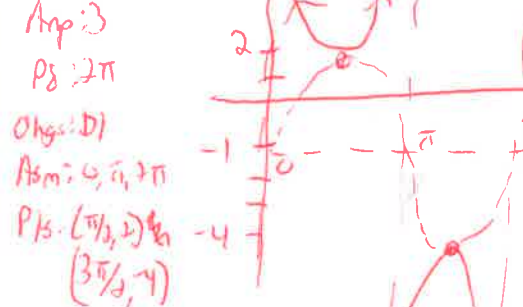
6.) $y = -\cot(2\theta) + 4$



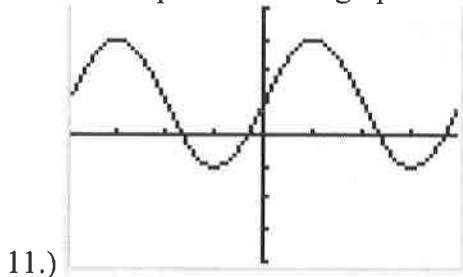
8.) $y = \frac{1}{2}\csc(\theta - \frac{\pi}{2})$



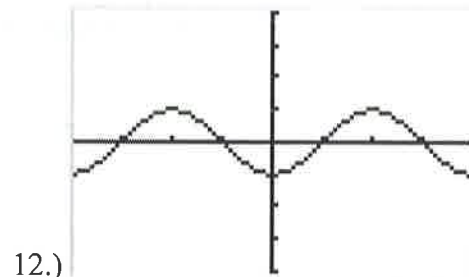
10.) $y = 3\csc(\theta) - 1$



Write the equation of the graph using sin:

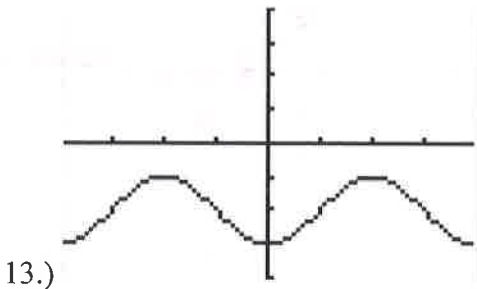


$$y = 2\sin\theta + 1$$

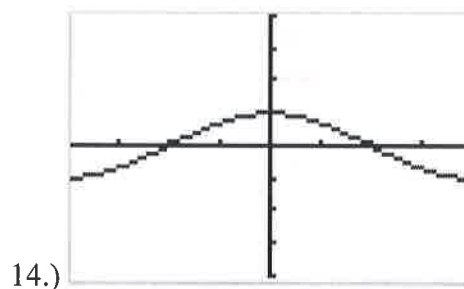


$$y = \sin\left(\theta - \frac{\pi}{2}\right)$$

Write the equation of the graph using cos.

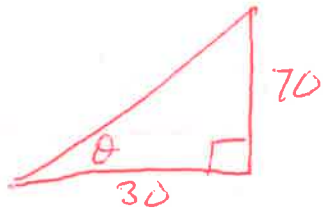


$$y = -\cos\theta - 2$$



$$y = \cos\left(\frac{1}{2}\theta\right)$$

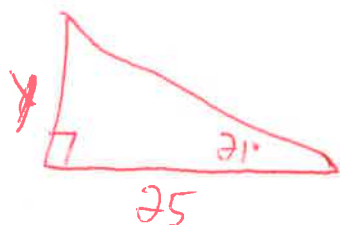
15.) The height of a radio transmission tower is 70 meters., and is casts a shadow of length 30 meters. Find the angle of elevation to the sun.



$$\tan\theta = \frac{7}{3}$$

$$\theta = 66.801^\circ$$

16.) Your football has landed on the edge of the roof of your school building. When you are 25 feet from the base of the building, the angle of elevation of your football is 21°. How high off the ground is your football?



$$\tan 21 = \frac{y}{25}$$

$$y = 9.597 \text{ ft.}$$