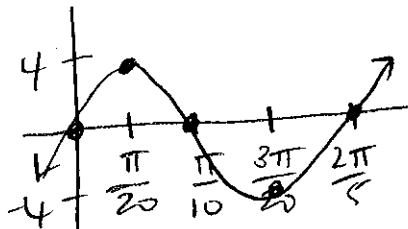


ALGEBRA 2 – GRAPHING TRIG FUNCTIONS

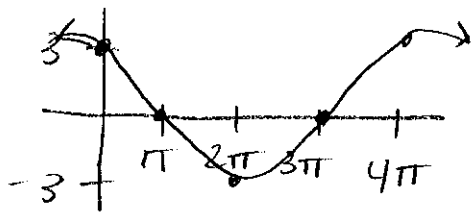
key

Graph one complete period of each of the following trig functions. Be sure to label all x and y axes.

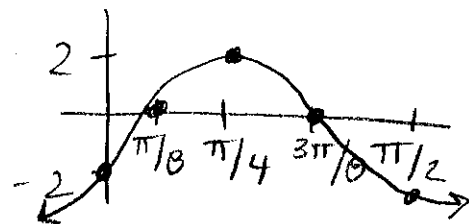
1. $y = 4\sin 5x$
 $a = 4$ $p = \frac{2\pi}{5}$



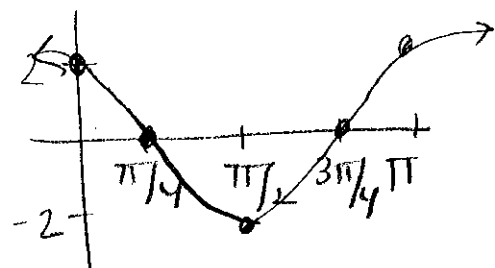
2. $y = 3\sin \frac{\theta}{2}$
 $a = 3$ $p = 4\pi$



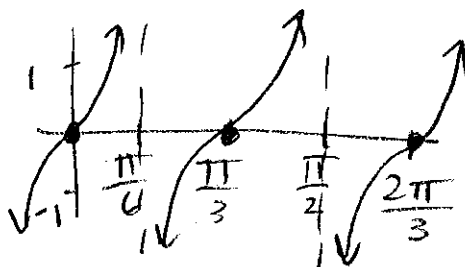
3. $y = -2\cos 4x$
 $a = 2$ $p = \frac{\pi}{2}$



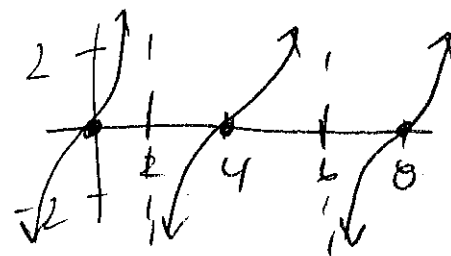
4. $y = 2\cos 2x$
 $a = 2$ $p = \pi$



5. $y = \tan 3x$
 $a = 1$ $p = \frac{2\pi}{3}$



6. $y = 2\tan \frac{\pi}{4}x$
 $a = 2$ $p = 8$



7. Graph $y = \sin(x)$ and $y = \sin(x) + 2$ in your calculator using the following

- window: Xmin: 0
- Xmax: 2π
- Ymin: -2
- Ymax: 3

Describe the transformation from the parent function. *up 2*

8. Using your knowledge of transformations, how do you think the graphs of $y = \sin(x)$ and $y = \sin(x + \pi)$ would compare?

left + pi (~3.14)