

**Trig Review #1**  
**No Calculators**

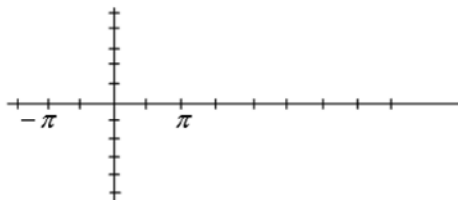
**Pre Calculus**

**Name** \_\_\_\_\_

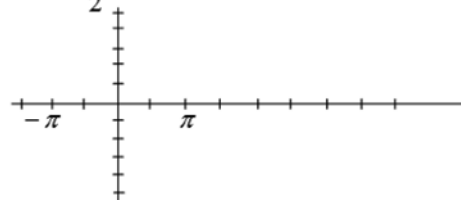
1. For what angle  $\theta$ ,  $0^\circ \leq \theta \leq 270^\circ$ , does  $\sin \theta = -1$ ?
2. Write  $\cos 120^\circ$  in simplest radical form.
3. If  $\sin \theta = \frac{3}{5}$  and  $\cos \theta$  is negative, find  $\tan \theta$ .
4.  $\sin \alpha$  is  $\frac{4}{9}$  and  $\alpha$  is in quadrant II. Find  $\sec \alpha$ .
5. Given  $\angle B$  in standard position with the terminal side of  $B$  passing through  $(-2, -5)$ . Find  $\sin B$  in simplest radical form.
6. Find the reference angle for  $482^\circ$ .
7. Express  $\tan(-213^\circ)$  as a function of a positive acute angle.
8. Find the exact value of  $\tan 30^\circ \sin 60^\circ - \cos 180^\circ \cos 60^\circ$
9.  $\cos 73^\circ = m$ . What positive acute angle  $A$  has  $\sin A = m$ ?
10.  $\sin \theta = 3w$ . Find  $\csc \theta$ .
11.  $\tan \theta = \sqrt{3}$  and  $\theta$  is in the third quadrant. Find the measure of  $\angle \theta$ .
12. Express  $\cot 243^\circ$  as a function of a positive acute angle.
13. Given  $\sin 160^\circ = a$ . Find the value of the following in terms of  $a$ :  $\frac{\sin 20^\circ - \csc 200^\circ}{\tan 160^\circ \cot 160^\circ - \sin 340^\circ}$

14 – 23. Graph the following for one period.

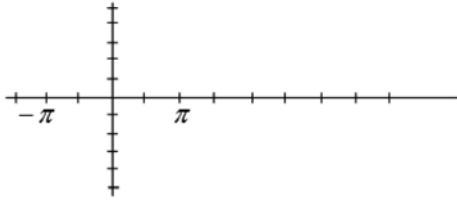
14.  $y = 2 \sin x$



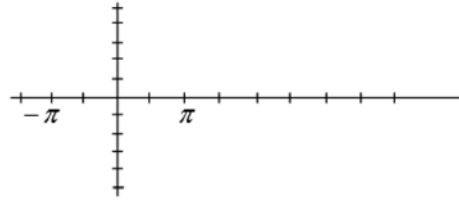
15.  $y = \cos \frac{1}{2}x$



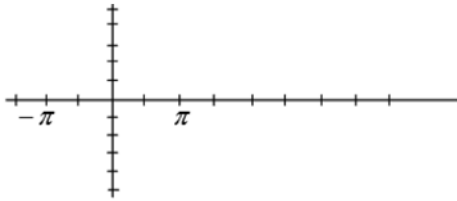
$$16. y = -\frac{1}{2} \cos \frac{2}{3} x$$



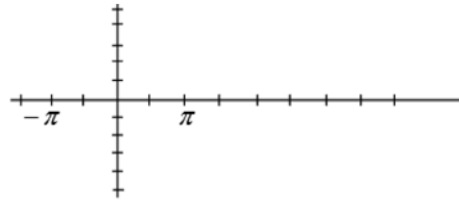
$$17. y = 3 \sin 2x$$



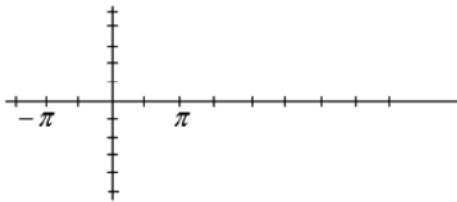
$$18. y = 1 + 2 \sin 2x$$



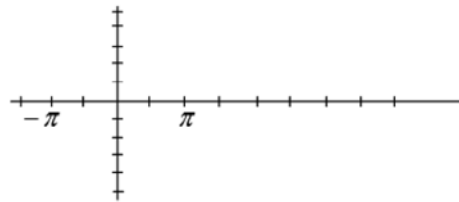
$$19. y = -2 - \cos \frac{3}{2} x$$



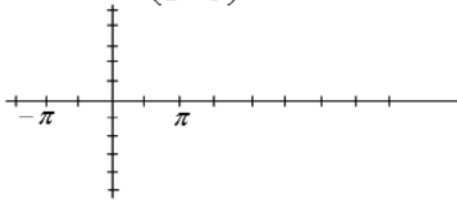
$$20. y = 2 \sin \left( x - \frac{\pi}{3} \right)$$



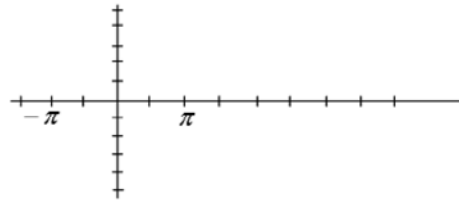
$$21. y = 1 + \cos 2 \left( x + \frac{\pi}{6} \right)$$



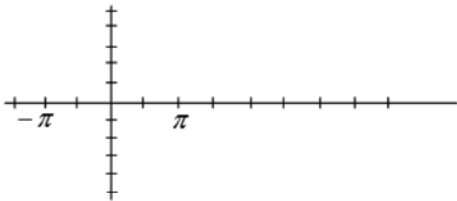
$$22. y = -2 + 3 \sin \left( \frac{x}{2} - \frac{\pi}{3} \right)$$



$$23. y = 2 \sin x + \cos 2x$$



$$24. y = \sin \frac{1}{2} x + 2 \cos x$$



Scrambled answers to 1-12:  $17^\circ$ ,  $58^\circ$ ,  $240^\circ$ ,  $270^\circ$ ,  $-\frac{9}{\sqrt{65}}$ ,  $\frac{1}{3w}$ ,  $1$ ,  $-\frac{1}{2}$ ,  $-\frac{3}{4}$ ,  $-\frac{5}{\sqrt{29}}$ ,  $\cot 63^\circ$ ,  $-\tan 33^\circ$