

Table 1- Convert from Radians to Degrees or Degrees to Radians

1. 200°

2. $\frac{4\pi}{9}$

3. -108°

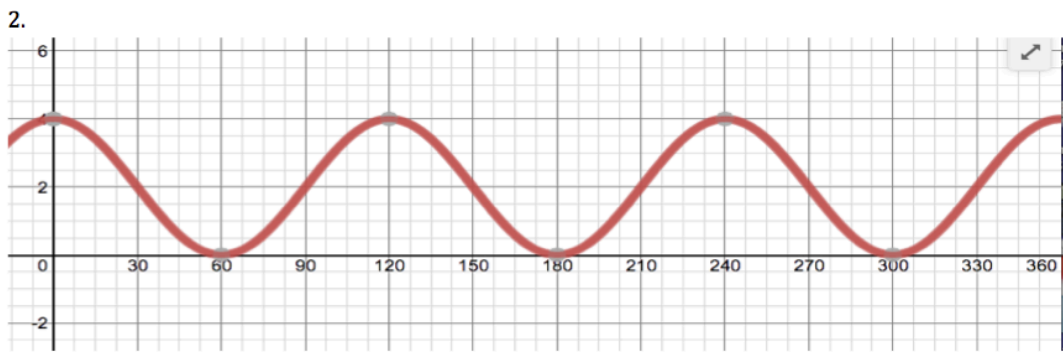
4. $\frac{-5\pi}{8}$

5. 279°

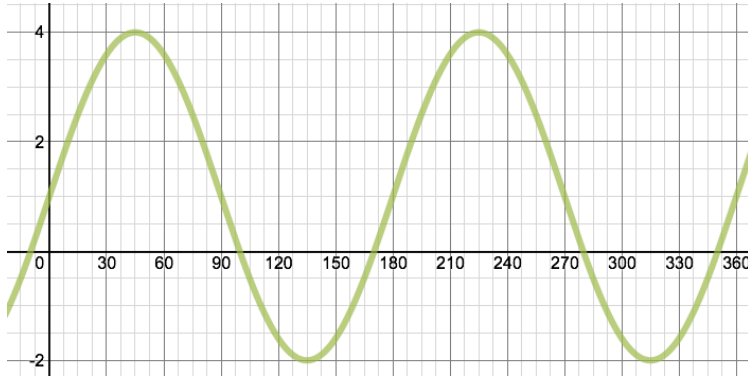
6. $\frac{25\pi}{12}$

Table 2- Write the equation for each graph.

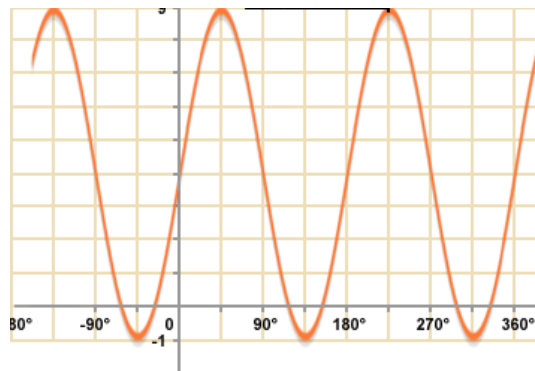
1.



2.



3.



4.

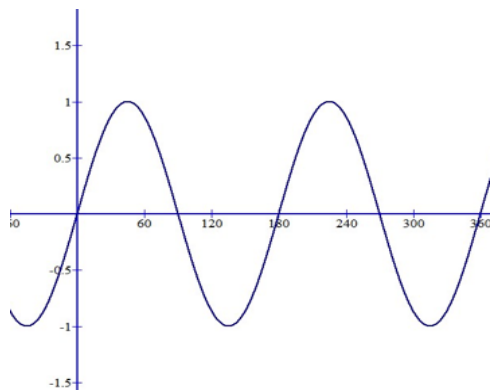


Table 3- Name the midline, amplitude, period, and shift.

1. $y = \cos(3x - 30^\circ) - 2$
2. $y = \frac{1}{2} \sin(2x + 45^\circ) + 3$
3. $y = 3 \sin(x)$
4. $y = 2 \cos\left(\frac{1}{2}x + 15^\circ\right) - 1$
5. $y = \sin x + 1$

Table 4- Graph each equation.

1. $y = 3 \sin(2x) - 2$

2. $y = 4 \cos x$

3. $y = -2 \sin x + 3$

4. $y = \sin(3x - 30^\circ) - 1$

Table 5- Solve for the trig values.

1. $\sin -150^\circ$

2. $\cos 210^\circ$

3. $\tan \frac{7\pi}{4}$

4. $\sin 870^\circ$

5. $\cos \frac{9\pi}{4}$

6. $\tan -450^\circ$

7. $\sin \frac{13\pi}{3}$

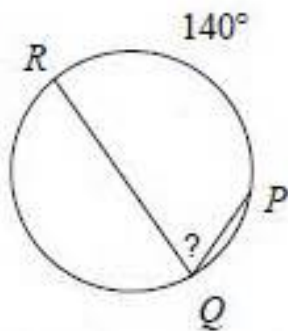
8. $\tan 330^\circ$

Table 6- Write the equation with the given information.

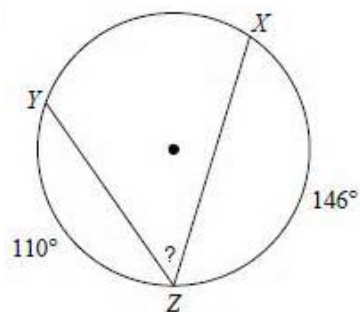
1. midline: $y = -4$ amplitude: 2 period: 360
2. midline: $y = 1$ amplitude: 3 period: 90
3. midline: $y = 0$ amplitude: 1 period: 120 horizontal shift: 30° to the right
4. midline: $y = -2$ amplitude: 4 period: 180 horizontal shift: 45° to the left
5. midline: $y = 3$ amplitude: 1 period: 72 horizontal shift: 90° to the right
6. midline: $y = 0$ amplitude: 2 period: 6

Table 7- Review

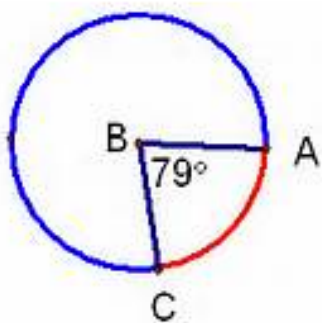
1. Find the measure of $\angle RQP$.



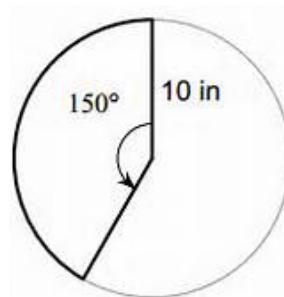
2. Find the measure of $\angle YZX$.



3. Find the measure of the arc AC.



4. Find the area of the sector.



5. Find the arc length of arc FH.

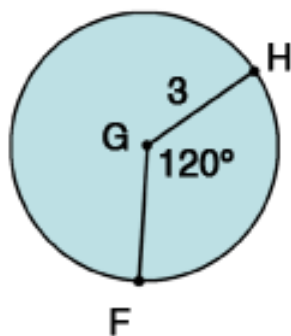
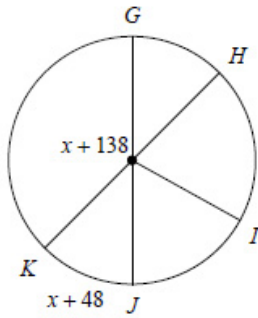
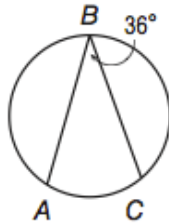


Table 8- Review

1. Solve the equation: $-3(x + 2) + 6x = 2x + 3$
2. Solve the equation: $2(4x + 3) + 5 = 3(x + 2)$
3. Solve for x .



4. Using the picture in #3, solve for the measure of arc JKH .
5. Solve for arc AC .



6. Solve for the missing angles.

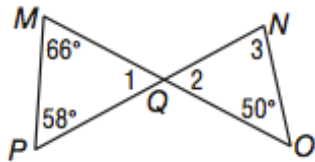


Table 5- Solve for the trig values.

1. $\sin -150^\circ$

2. $\csc 210^\circ$

3. $\cot \frac{7\pi}{4}$

4. $\sin 870^\circ$

5. $\sec \frac{9\pi}{4}$

6. $\tan -450^\circ$

7. $\sin \frac{13\pi}{3}$

8. $\tan 330^\circ$

Trig Applications

1. A Ferris wheel has a diameter of 30 ft. with the center 18 ft. above the ground. It makes one complete rotation every 60 seconds.
 - a. Draw the graph.
 - b. Write the equation of the graph.
 - c. What is the height of the rider at 52 seconds?

2. A Ferris Wheel has a 40 ft. radius and the center is 50 ft. off the ground. It makes one complete rotation in 120 seconds.
 - a. Draw the graph.
 - b. Write the equation of the graph.
 - c. What is the height of the rider at 52 seconds?