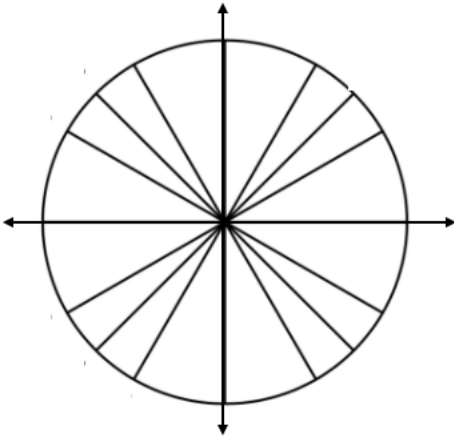


Unit 7 Review

1) Determine the radian measure of an angle that measures 160° .

2) Determine the degree measure of an angle that measures $\frac{8\pi}{5}$ radians.

3) You can use the unit circle to determine values of sine and cosine functions.



a) Locate the intersection of the terminal ray and the unit circle at 225° . Label this point P.

b) Determine the values of $\sin 225^\circ$ and $\cos 225^\circ$. Identify which is which.

c) Determine the coordinates of point P and write the ordered pair.

d) Determine the value of $\tan 225^\circ$.

4) List all the values of x over the interval $[0, 2\pi]$ for which $\sin x = \frac{\sqrt{3}}{2}$

5) List all the values of x over the interval $[0, 2\pi]$ for which $\tan x = -\frac{\sqrt{3}}{3}$.

Unit 7 Review, page 2

6) Determine the arc length for a central angle measure of 330° in a circle with a radius of 10 cm.

7) Solve the equation $\tan x + \sqrt{3} = 0$,
where $0 \leq x \leq 2\pi$.

8) Given $\sin \theta = \frac{4}{9}$ in Quadrant II, determine
the exact, reduced value of $\cos \theta$.

Exemplary

9) Solve the equation $2 \cos^2 x - \cos x = 1$ over the domain of all real numbers. Give your answer in radians.