

Period:

Lesson 9.1.7 Assignment

9-88. What is the measure in degrees of a central angle measuring $\frac{7\pi}{3}$ radians? [Homework Help](#)



- What other angles correspond to the same point on the circle?
- Make a sketch of the unit circle showing the resulting right triangle.
- What are $\sin(\frac{7\pi}{3})$, $\cos(\frac{7\pi}{3})$ and $\tan(\frac{7\pi}{3})$ exactly?

9-89. Evaluate each of the following trig expressions without using a calculator. [Homework Help](#)



a. $\sin(180) =$	b. $\sin(360) =$	c. $\sin(-90) =$
d. $\sin(510) =$	e. $\cos(90) =$	f. $\tan(-90) =$

9-90. How do you convert from degrees to radians and from radians to degrees? Explain your method and justify it completely. [Homework Help](#) 

9-91. Convert each of the following angle measures. Give exact answers. [Homework Help](#) 

a. $\frac{7\pi}{6}$ radians to degrees.	b. $\frac{5\pi}{3}$ <i>radians to degrees</i>	c. 45 degrees to radians
d. 100 degrees to radians	e. 810 degrees to radians	f. $\frac{7\pi}{2}$ <i>radians to degrees</i>

9-92. For an angle θ in the third quadrant $\cos(\theta) = \frac{-12}{13}$. Use this information to calculate each of the following values without using a calculator. [Homework Help](#) 

a. $\sin(\theta)$

b. $\tan(\theta)$

9-93. Solve $\log_2(x) = 2^x$ using any method. [9-93 HW eTool](#) (Desmos) [Homework Help](#) 

9-94. What is the equation of a third degree polynomial that has roots $x=3, 2$, and -1 and passes through the point $(1,1)$? [Homework Help](#) 