TRIGONOMETRY – 2. Coordinate Plane

Name:

Date:

Please remember to show/communicate all your work. You DO NOT need to answer every question, two correct answers at any level will demonstrate a student's level of attainment.

LEGEND						
✓	M	✘	S	N	G	H
correct	mostly correct	incorrect	silly mistake	did not know how to start or skipped	with group	got help

	Mild (🌶🌶)		Medium (🌶🌶🌶)		Spicey (🌶🌶🌶🌶)
Questions	#1	#2	#3	#4	#5
Results					

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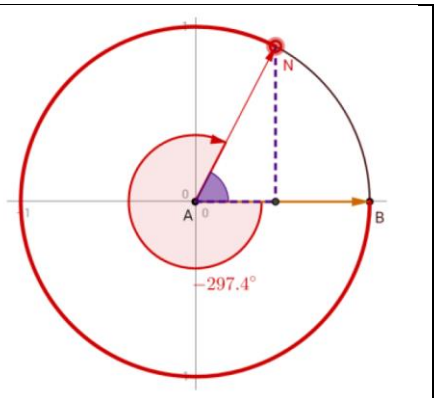
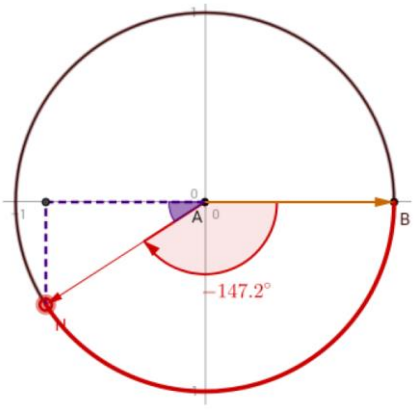
1. Complete the table below based on the terminal arm provided.

∠ in standard position	quadrant #	reference ∠	possible coterminal ∠	
				
				

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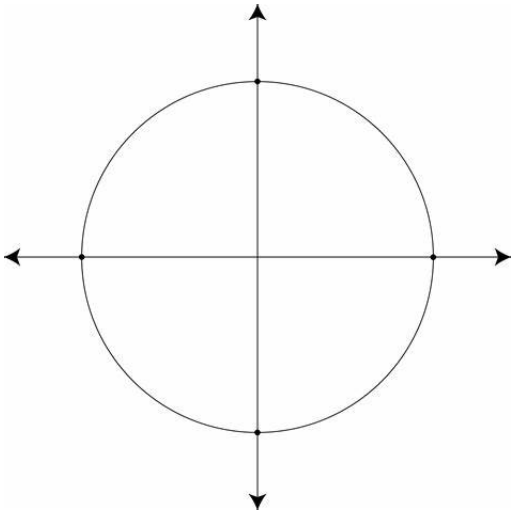
2. Draw coordinate $(-1, \sqrt{3})$ on the end of a terminal arm. State the exact values of following:

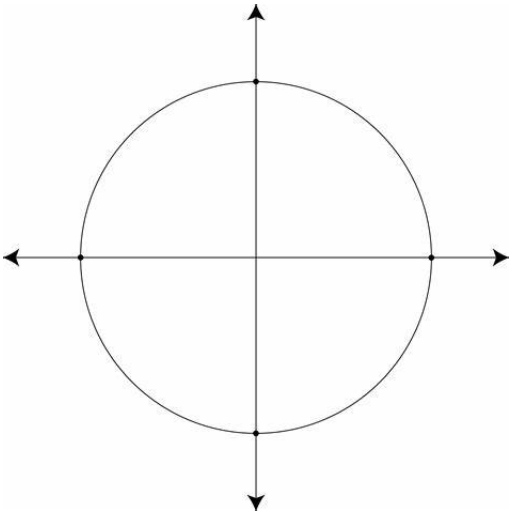


$sin\,\theta =$

$cos\,\theta =$

$tan\,\theta =$

3. The point $(4, y)$ is on the terminal arm formed by $sin\,\theta = \frac{-\sqrt{3}}{2}$. Solve for y.



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4. Solve for the following value(s) of θ.

a) $sin\,\theta = \frac{2}{3}$ where $cos\,\theta > 0\ \&\ 0^\circ < \theta < 360^\circ$

b) $\frac{5}{2}\cos\theta + 4 = 2$ where $90^\circ < \theta < 360^\circ$

c) $4\,sin^2\,\theta = 1$ where $-180 < \theta < 270^\circ$

5. You get on a Ferris wheel with a radius of 21m and a low point of 3m from the ground. You rotate 240° from the bottom. How high off the ground are you at this point?