

Patterns of Reference Angles

Name _____

Use only My Hand-Made Circle to answer the following problems.

1. What triangle creates $\frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$? _____ What is the central angle? _____

Fill out the following chart.

	$\frac{\pi}{6}$	$\frac{5\pi}{6}$	$\frac{7\pi}{6}$	$\frac{11\pi}{6}$
Quadrant?				
Sin				
Cos				
Tan				

2. What triangle creates $\frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$? _____ What is the central angle? _____

Fill out the following chart.

	$\frac{\pi}{4}$	$\frac{3\pi}{4}$	$\frac{5\pi}{4}$	$\frac{7\pi}{4}$
Quadrant?				
Sin				
Cos				
Tan				

3. What triangle creates $\frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$? _____ What is the central angle? _____

Fill out the following chart.

	$\frac{\pi}{3}$	$\frac{2\pi}{3}$	$\frac{4\pi}{3}$	$\frac{5\pi}{3}$
Quadrant?				
Sin				
Cos				
Tan				

4. In what quadrant are all functions positive?
5. In what quadrant is only sine positive?
6. In what quadrant is only tangent positive?
7. In what quadrant is only cosine positive?