Lesson 68 Objective: SWBAT rewrite trigonometric functions with positive acute angles.

Kickoff-

1) Determine the quadrant in which the terminal side of the given angle lies.

a) csc x >0 and cot x < 0

b) sin x <0 and sec x > 0

2) Find the supplement if possible in radians.

a) $\frac{5\pi}{12}$

b) $\frac{5\pi}{3}$

HW

A **reference angle** is the acute angle formed by the terminal side of the given angle and the x-axis.

- Reference angles may appear in all four quadrants.
- Angles in quadrant I are their own reference angles.

Quadrant I

Quadrant II

Quadrant III

Quadrant IV

Find the reference angles of the following angle measures:

1) 115°

2) 310°

3) 495°

4) 250°

5) 210°

6) 45

Rewriting Trigonometric Functions as ~~Positive Acute Angles~~ reference Ang

Writing Positive Acute Angles:

Q: Quadrant
R: Reference Angle
F: Function (sin, cos, tan, csc, sec, cot)
S: Sign (positive or negative)

Examples: Rewrite each of the following as a function of a positive acute angle

1) Sin 189°

2) Tan 315°

3) Cos 545°

4) Tan (-250°)

5) Sec (-240°)

6) Cot $\frac{5\pi}{4}$