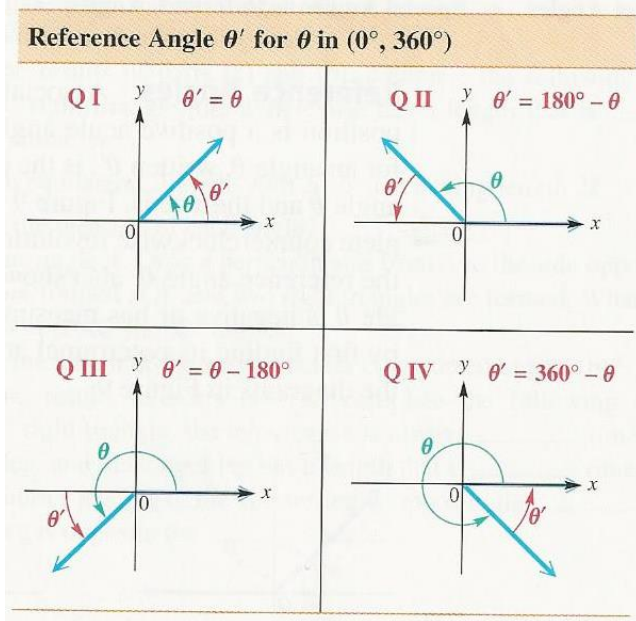


Unit 1.5 Notes Trigonometric Functions of Acute Angles

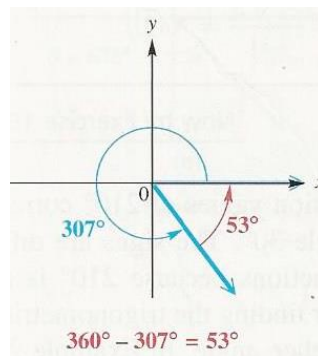
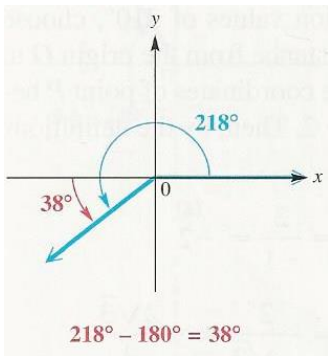
Reference Angles

The reference angle is the angle measure from the terminal side to the x-axis.

The following is how to find the reference angle for each quadrant:



Below are two examples of finding the reference angle:



Steps to finding Trig function values:

Step 1: Find coterminal angle between 0° and 360° .

Step 2: Find the reference angle.

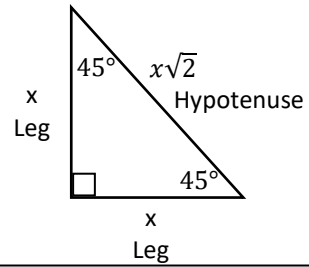
Step 3: Find the trig function for the angle.

Step 4: Find the correct sign for the function in the given quadrant.

Special right triangles

45°, 45°, 90° triangle

leg to hypotenuse: times by $\sqrt{2}$
hypotenuse to leg: divide by $\sqrt{2}$
leg to leg: times by 1



30°, 60°, 90° triangle,

short leg to hypotenuse: times by 2
hypotenuse to short leg: divide by 2
short leg to long leg: times by $\sqrt{3}$
long leg to short leg: divide by $\sqrt{3}$

