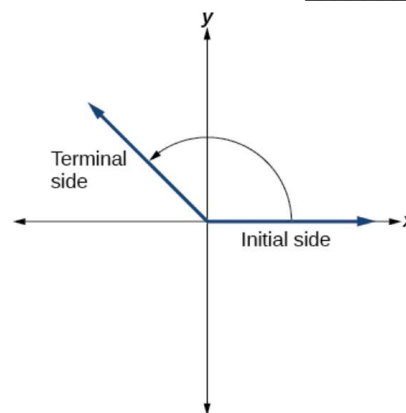


VOCABULARY:

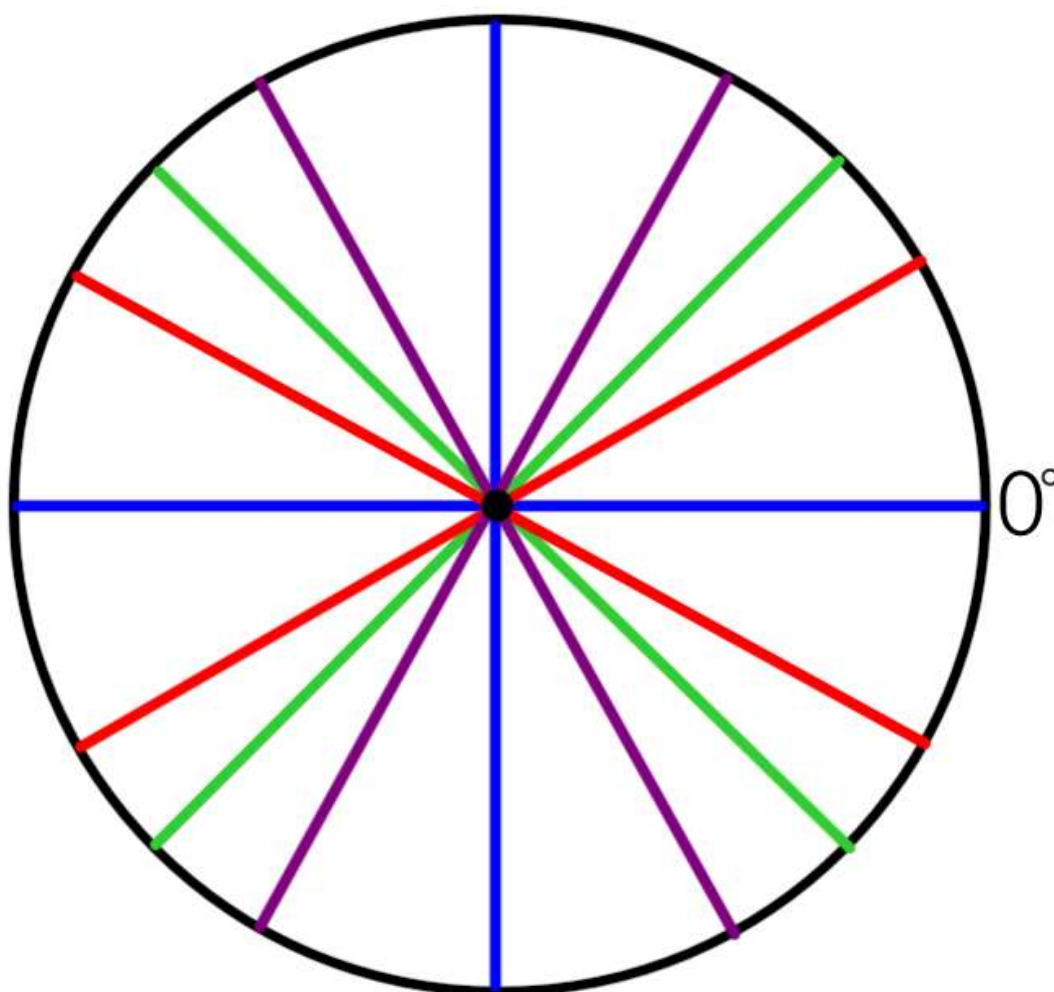
Standard Position: An angle with its vertex at the origin and its _____ side along the positive x-axis.

The _____ side is the starting side.

The _____ side is the ending side.



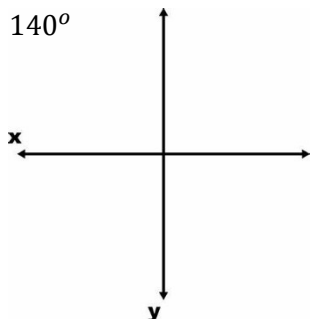
A full rotation is 360° . Starting with the initial side, label the angle of each line in degrees.



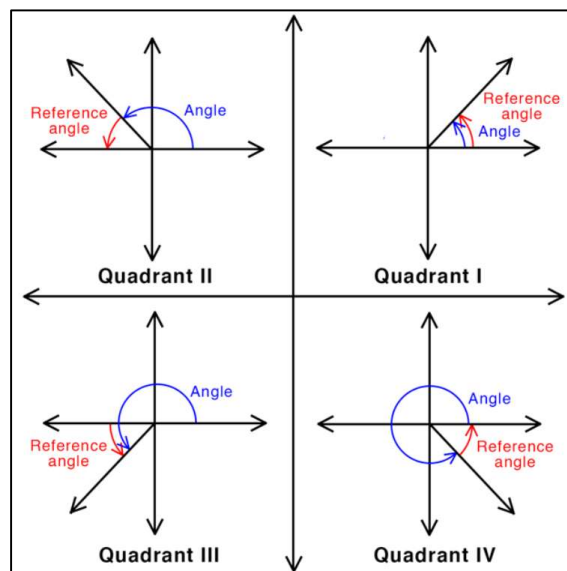
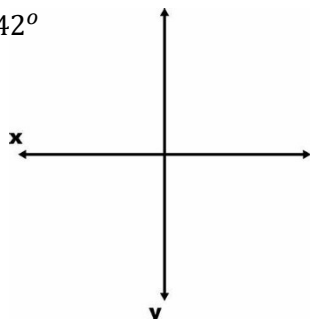
Reference Angle: The acute angle formed by the _____ side and the _____.

Find the reference angle.

1. 140°

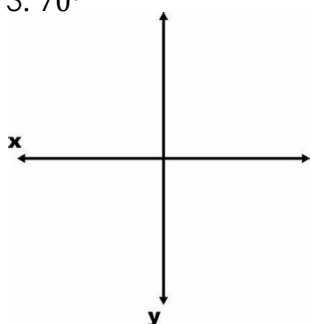


2. 242°

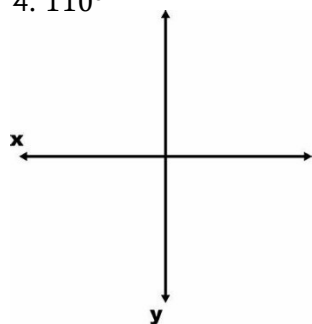


You try these! Sketch the angle in standard position and determine the reference angle.

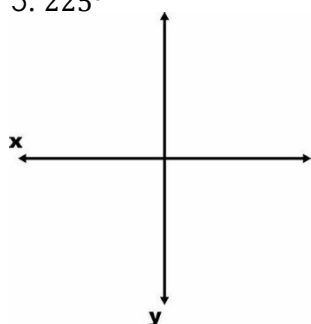
3. 70°



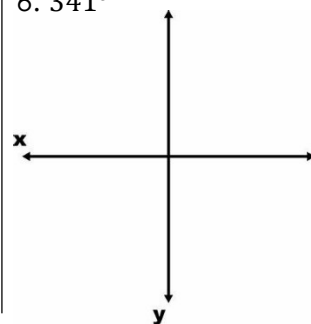
4. 110°



5. 225°



6. 341°



Investigating radians!

1. Draw a horizontal line through the middle of your desk.
2. Put a point in the middle of your line.
3. Put one end of your string on the center and your marker at the other end of the string. Draw a circle! This string represents your RADIUS.
4. Starting where the circle crosses the x-axis on the right, count the number of "strings" needed to get halfway around the circle. And then the full circle.

How many radii does it take to get to 180 degrees?

How many radii does it take to get to 360 degrees?

_____ : The angle of the arc created by wrapping a circle's radius around its circumference. A radian is just another way of measuring angles besides degrees.

Now go back to the previous page and fill in the radians on the circle!