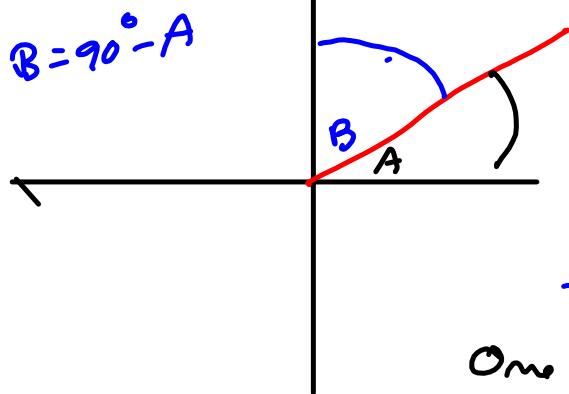


Steve Mills

MAT 122

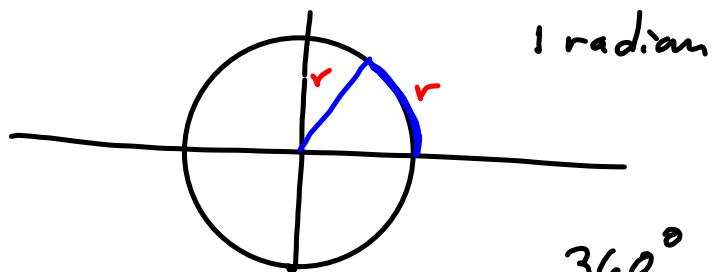
Trigonometry



Complimentary
complement

$A + B$ add up to 90°
 360° 2π radians to one revolution.

One radian is the measure of an angle corresponding to an arc length of the radius.



Convert 2π radians

$$\frac{360^\circ}{1 \text{ rev.}}$$

$$\frac{2\pi \text{ radians}}{1 \text{ rev}}$$

to degrees.

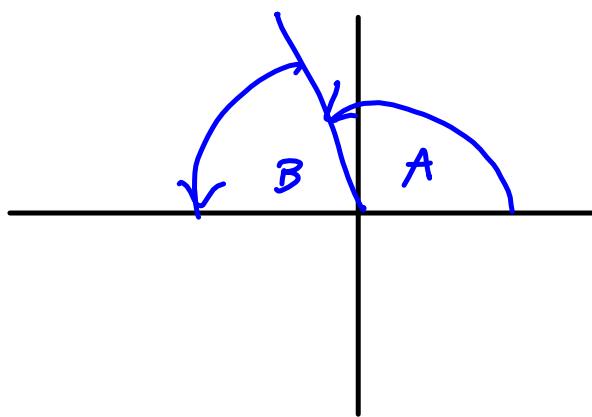
$$(2\pi) \left(\frac{180^\circ}{\pi}\right) = 360^\circ$$

$$\frac{360}{2\pi} = \frac{180}{\pi}$$

$$\left(\frac{\pi}{4}\right) \left(\frac{180^\circ}{\pi}\right) = 45^\circ$$

$$(30^\circ) \left(\frac{\pi}{180^\circ}\right) = \frac{\pi}{6}$$

Supplements add up to 180°



Measure angles
counterclockwise,
and standard
position starts
along positive
x-axis.

If the angle's bigger than 90 degrees or is negative, it has no complement.

If the angle's bigger than 180 degrees or is negative, it has no supplement.

$$(1 \text{ radian}) \left(\frac{180^\circ}{\pi \text{ radian}} \right) \approx 57.2977951^\circ \\ \approx 57^\circ$$

$$\frac{2\pi}{6.28} = 1$$

$\frac{16193.23312}{500 * .232925587 / (.005833333 * 1.232925587)}$
16193.23312
$180/\pi$
57.29577951
■

Protractor, Ruler.

RED PEN

{ COMMON SENSE
COMMON COURTESY
Kindness