

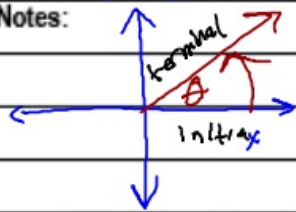


Essential Question:

How do triangles behave in a circle centered at the origin?

Questions:

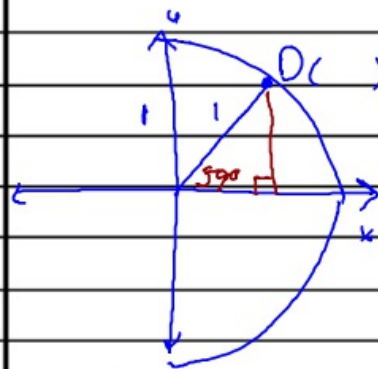
Notes:



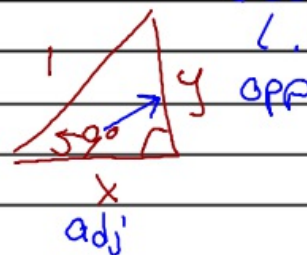
positive angles have their initial side on the x-axis, then move counter-clockwise to their terminal side

negative angles move clockwise from the x-axis

A UNIT CIRCLE IS A CIRCLE OF RADIUS 1 THAT IS CENTERED ON THE ORIGIN



Find the exact coordinates of point D
($\cos 59^\circ$, $\sin 59^\circ$)
(.515, .857)



Recall:

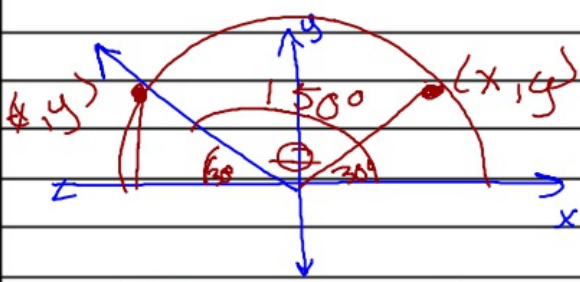
$$\sin \theta = \frac{\text{opp}}{\text{hyp}} \quad \cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

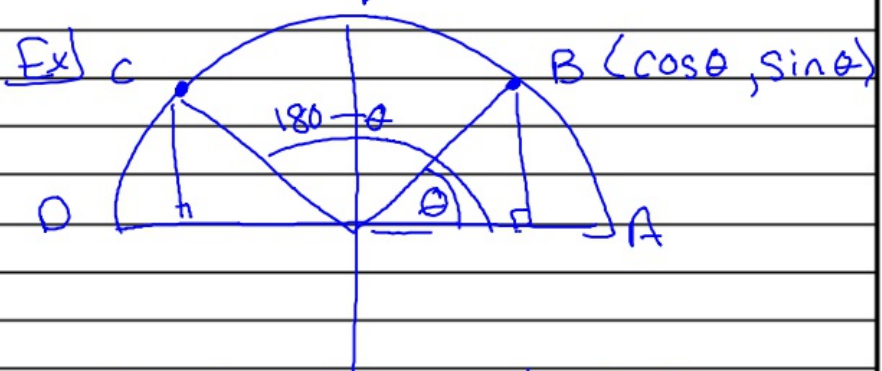
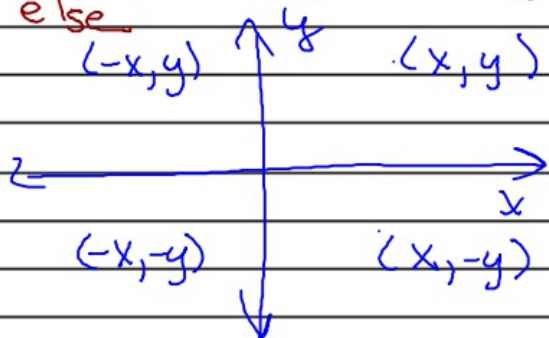
In unit circle ($x = \cos \theta$, $y = \sin \theta$)

Questions:

Notes: OBTUSE ANGLES



If I know what the point would be for the acute angle in Q I, I can use supplementary angles to find the point anywhere else



use the diag diagram to find points B + C use 3 sig fig

$$\theta = 40^\circ$$

$$B = (\cos \theta, \sin \theta) = (.766, .643)$$

$$C = (-.766, .643)$$

376
HW II E p 208
1, 3