

Degrees vs. Radians vs. Revolutions

What relationship exists between radians and degrees?

Fill in the following table. **Show your work for finding each missing measure.**

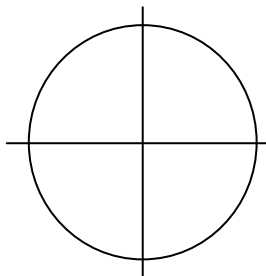
Revolutions	Degrees	Radians
$\frac{1}{12}$	1)	2)
$\frac{4}{5}$	3)	4)
5)	45°	6)
7)	210°	8)
9)	10)	$\frac{\pi}{4}$
11)	12)	$\frac{5\pi}{6}$
13)	112°	14)
15)	150°	16)
17)	800°	18)
19)	20)	6 radians
21)	22)	2.5 radians
23)	24)	$\frac{5\pi}{4}$

Complete the table and show your work.

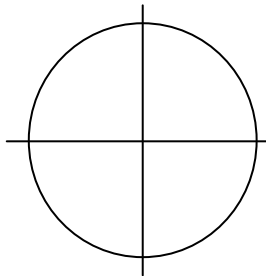
Revolutions	Degrees	Radians
$\frac{3}{8}$		
	540°	
		$\frac{5\pi}{6}$
	60°	
		$\frac{\pi}{3}$
$\frac{9}{8}$		
		$\frac{5\pi}{3}$
	216°	
	Approx.	3 radians
$\frac{5}{2\pi}$	Approx.	

Sketch a picture that would show the location of terminal point $P(x, y)$ after a rotation of t (the rotation in radians around the unit circle). Your picture should show the path around the circle.

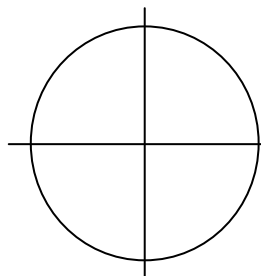
a) $t = \frac{\pi}{2}$



b) $t = 6\pi$

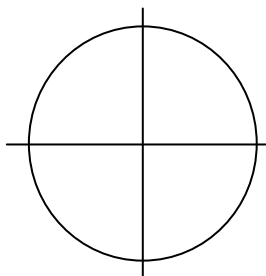


c) $t = \frac{15\pi}{2}$



Find the reference number and the terminal point $P(x, y)$ determined by t (the rotation in radians around the unit circle).

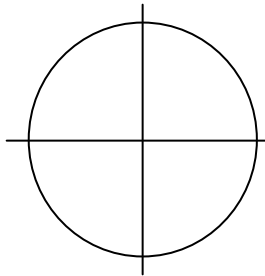
a) $t = \frac{7\pi}{4}$



T.P. _____

R.N. _____

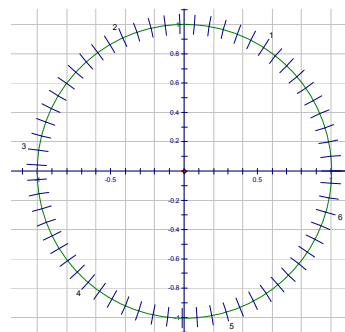
b) $t = \frac{13\pi}{6}$



T.P. _____

R.N. _____

c) $t = 2$



T.P. _____

R.N. _____ Extra Credit