

Name:  
Group 1  
Result:

1.

(2 points)

Convert the following angles to radians/degrees:

radians	degrees
$\frac{\pi}{12}$	
	$20^\circ$
$\frac{5\pi}{9}$	
	$800^\circ$

2.

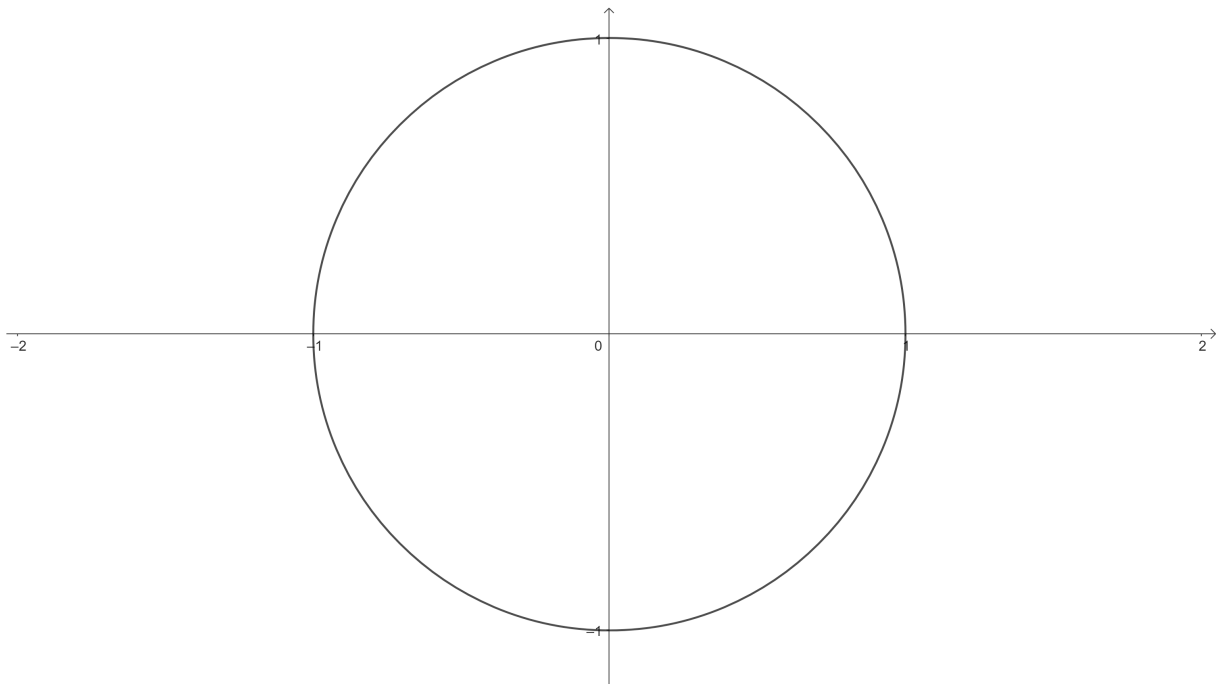
(3 points)

On the unit circle mark the following angles and state the exact coordinates of the point of intersection of the terminal side of the angle with the unit circle.

(a)  $\frac{5\pi}{6}$ ,

(b)  $\pi$ ,

(c)  $\frac{7\pi}{4}$ .



**3.***(2 points)*

A sector has an angle of  $\frac{\pi}{5}$  and an area of  $\frac{18\pi}{5}$ . Find its radius and perimeter.

**4.***(3 points)*

Calculate the following expression:

$$\frac{\sin\left(\frac{23\pi}{4}\right) + \cos\left(\frac{29\pi}{6}\right)}{\sin(-13\pi) - \cos\left(\frac{13\pi}{3}\right)}$$