

Name:

Group 2

Result:

1.*(2 points)*

Convert the following angles to radians/degrees:

radians	degrees
$\frac{\pi}{10}$	
	15°
$\frac{7\pi}{9}$	
	1000°

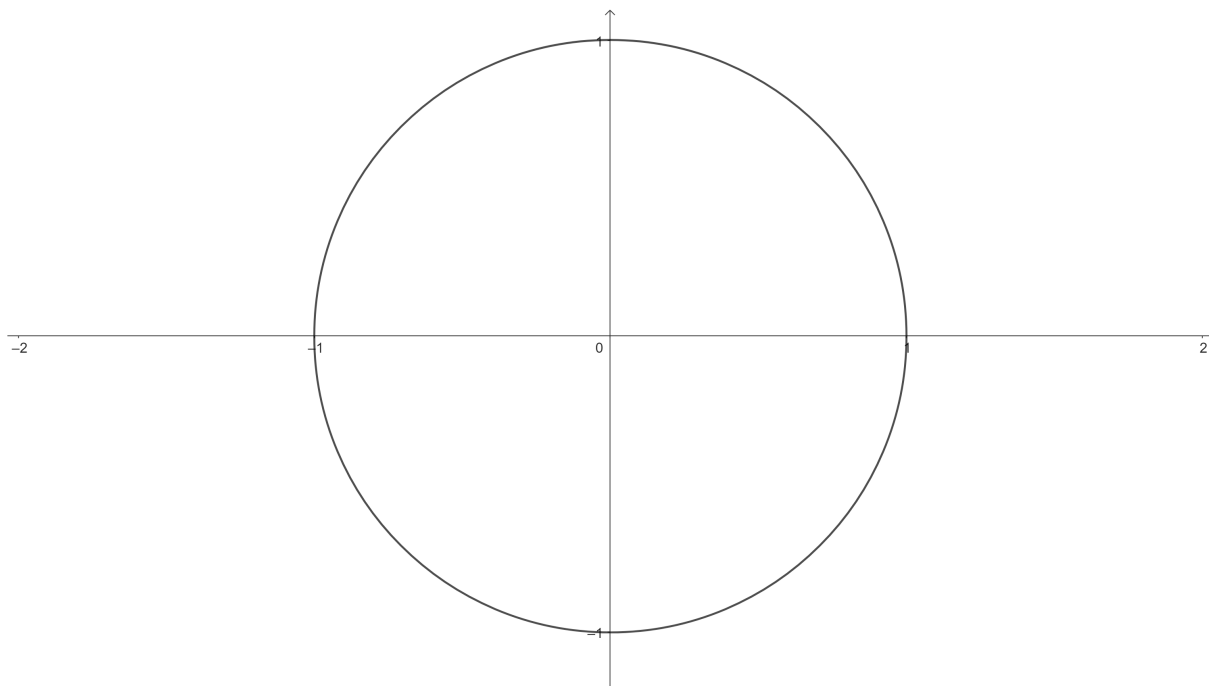
2.*(3 points)*

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) $\frac{3\pi}{4}$,

(b) $\frac{3\pi}{2}$,

(c) $\frac{11\pi}{6}$.



3.*(2 points)*

A sector has an angle of $\frac{\pi}{7}$ and an area of $\frac{8\pi}{7}$. Find its radius and perimeter.

4.*(3 points)*

Calculate the following expression:

$$\frac{\sin\left(\frac{27\pi}{4}\right) + \cos\left(\frac{31\pi}{6}\right)}{\sin(-11\pi) - \cos\left(\frac{11\pi}{3}\right)}$$