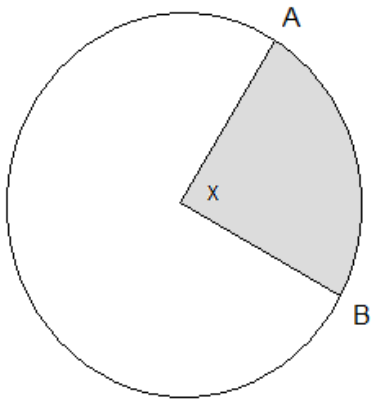
Name:

QUIZ – MATH GRADE 11

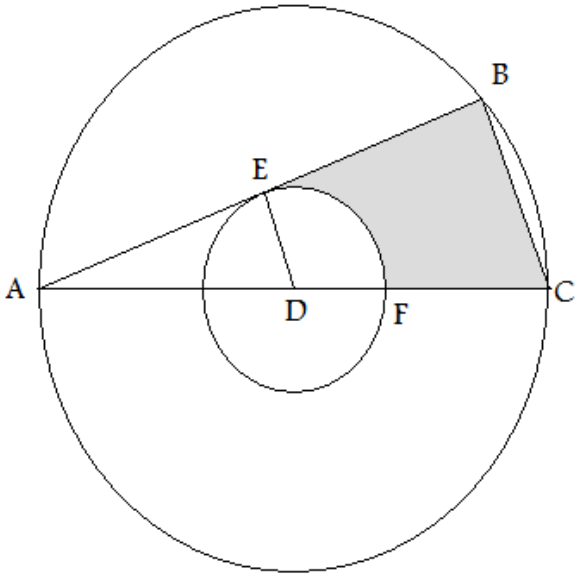
1. (10%) (Complete the table with exact simplified results:

α (Deg)	α (Rad)
45	
–135	
150	
270	
–2	
	$\frac{\pi}{10}$
	$--\frac{4\pi}{5}$
	$\frac{5\pi}{8}$
	K (Answer should be given as an expression)
	0.2 (Answer should be given as an expression)

2. (20%) Given that the radius of the circle is 5 m and the area of the shaded sector is 25 m^2, Find the **<u>angle</u>** x in <u>radians and degrees</u> and the length of the **<u>major</u>** arc AB. Round to the nearest degree. Diagram not to scale.



3. (35%) Given the following diagram in which there are 2 concentric circles. D is the center of the circles. EAD = 30º. AB is tangent to the smaller circle. DC = 8 cm. Diagram not to scale.
Find (give exact answers):



a. (7%) The area of triangle ABC.

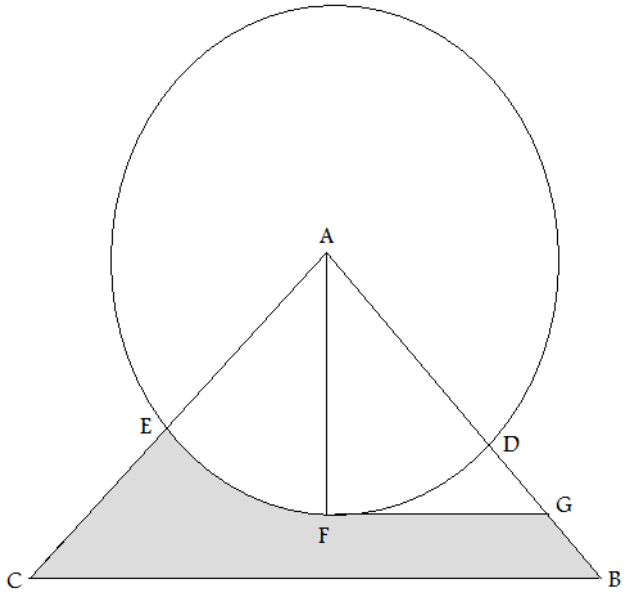
b. (7%) The area of the triangle AED.

c. (7%) The area of the sector EDF.

d. (7%) The area shaded

e. (7%) The perimeter of the area shaded.

4. (35%) Given the following diagram in which triangle ACB is isosceles and right angled. FG is parallel to CB. AFG = 90º. The radius of the circle is 6 cm. DG = GB. Diagram not to scale.
Find (give exact answers):



a. (7%) The area of triangle AFG.

b. (7%) The area of the triangle ACB.

c. (7%) The area of the sector AEF.

d. (7%) The area shaded

e. (7%) The perimeter of the area shaded.