

Name: _____

QUIZ 20 – MATH GRADE 9

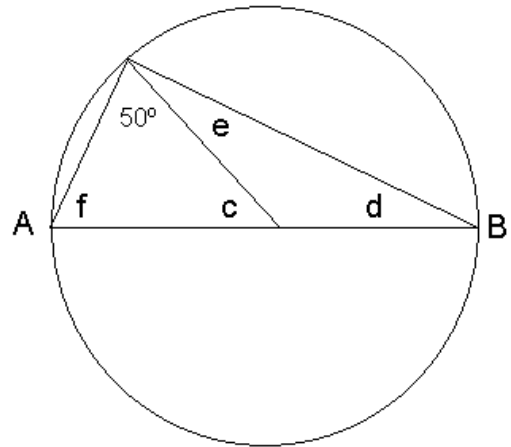
1. (20%) Given the circle, find all the missing angles. AB is the diameter of the circle

(5%) $f = \underline{\hspace{2cm}}$

(5%) $c = \underline{\hspace{2cm}}$

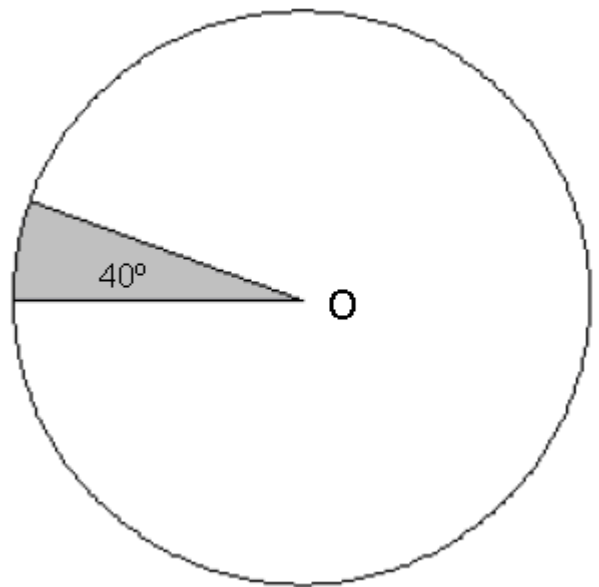
(5%) $d = \underline{\hspace{2cm}}$

(5%) $e = \underline{\hspace{2cm}}$



2. (30%) Given a circle whose radius is 5 cm as can be seen in the diagram. O is the centre of the circle.

- (10%) Find the percentage of the area that is **not shaded** with **2 significant figures**.
- (10%) Find the **exact** area of the shaded sector in terms of pi.
- (10%) Find the **exact** perimeter of the sector in terms of pi.



3. (50%) Given the following diagram. The triangle BAC is equilateral.
BC = 20 cm. The radius of the circle is 8 cm. C is the centre of the circle. Find
(give exact answers):

a. (8%) The length of the major arc DE.

b. (12%) The perimeter of the sector DEC.

c. (10%) The area of the sector DEC.

d. (10%) Find the area shaded.

e. (10%) The perimeter of the shaded area.

