

## Circle theorems

1. Points **A**, **B** and **C** are all on the circumference of the circle, **O** represents the centre. Calculate the angle *x*.

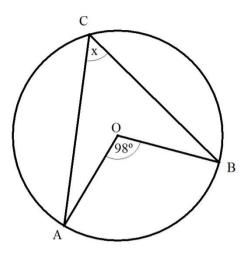


Diagram **NOT** accurately drawn

## = 49<sup>o</sup>

(1 Mark)

2. Points **A**, **B** and **C** are all on the circumference of the circle. Line **A B** is a straight line going through the centre **O**. Calculate angle *x* 

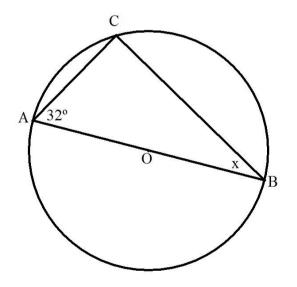


Diagram **NOT** accurately drawn

 $= 58^{o}$ 

(2 Marks)

3. Points **A**, **B** and **C** are all on the circumference of the circle. **O** represents the centre. Calculate the Angle of *x* and *y*.

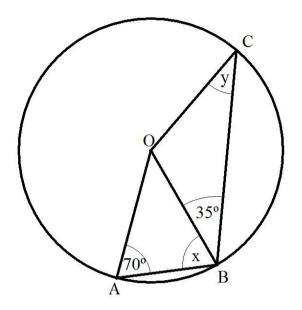


Diagram **NOT** accurately drawn

## $x = 70^{\circ}, y = 35^{\circ}$

(2 Marks)

4. Points **A**, **B** and **C** are all on the circumference of the circle. **O** represents the centre. Calculate the angle *x*.

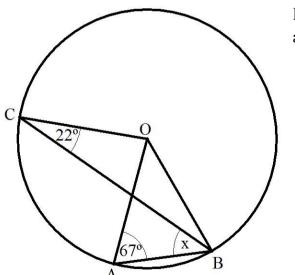


Diagram **NOT** accurately drawn

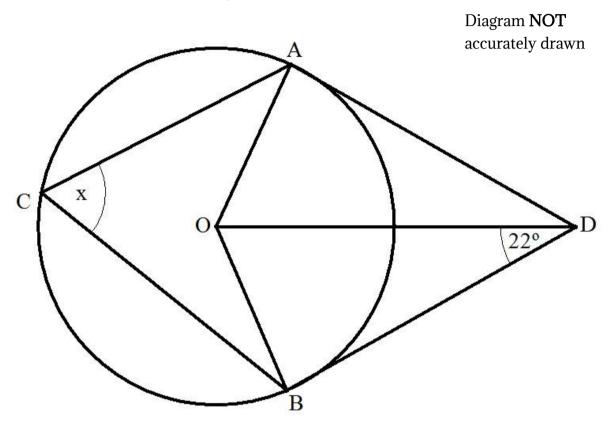
## = 45<sup>o</sup>

(3 Marks)

5. Points A, B and C are all on the circumference of the circle.O represents the centre.DA and DB are tangents to the circle.

Angle **BDO** =  $22^{o}$ 

Work out the size of angle *x*.



 $x = 68^{o}$ 

(3 Marks)

Visit <u>http://www.mathsmadeeasy.co.uk/</u> for more fantastic resources.

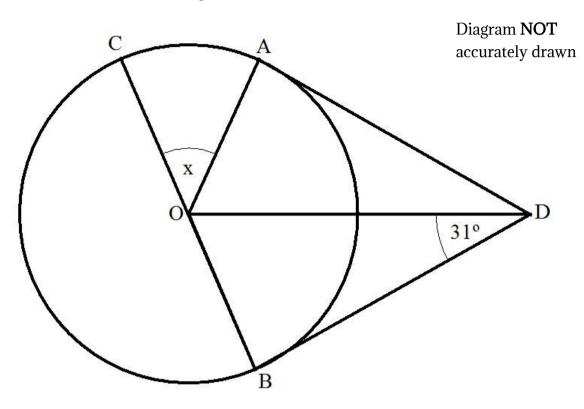
6. Points **A**, **B** and **C** are all on the circumference of the circle.

O represents the centre.

DA and DB are tangents to the circle.

Angle BDO = 31°

Work out the size of angle *x*.



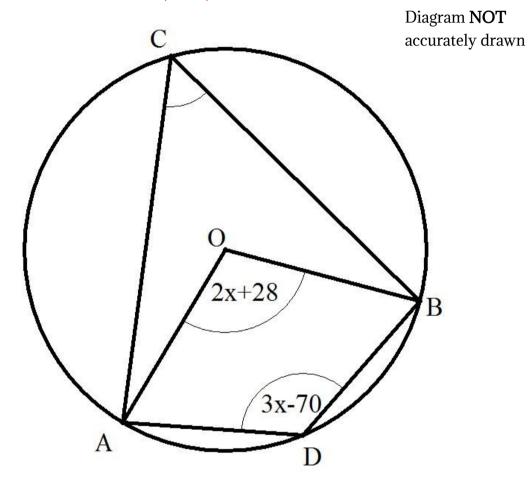
 $x = 62^{o}$ 

(3 Marks)

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7. Points A, B and C are all on the circumference of the circle.
O represents the centre.
Angle AOB = 2x + 28
Angle ADB = 3x - 70

Calculate the value for *x*. (Hard)



*x* = 59

(5 Marks)