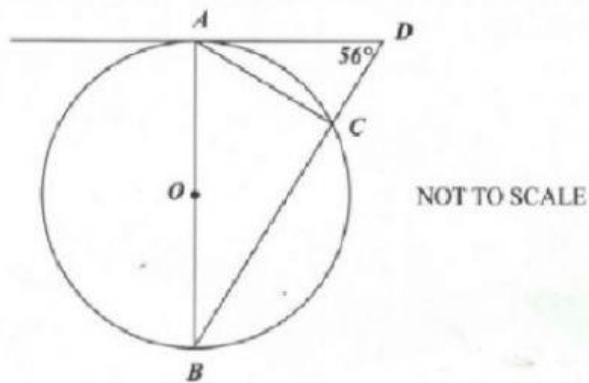


Circle Theorems

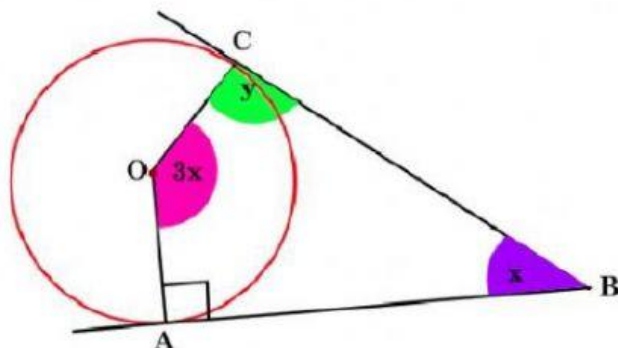
Answer the questions below.

1. AB is a diameter of the circle ABC with centre O . AD is a tangent to the circle at A . $\angle ADC = 56^\circ$.



- Calculate
- | | | | | |
|-------|--------------|---|----------------------|----------|
| (i) | $\angle BCA$ | = | <input type="text"/> | $^\circ$ |
| (ii) | $\angle ABD$ | = | <input type="text"/> | $^\circ$ |
| (iii) | $\angle CAD$ | = | <input type="text"/> | $^\circ$ |

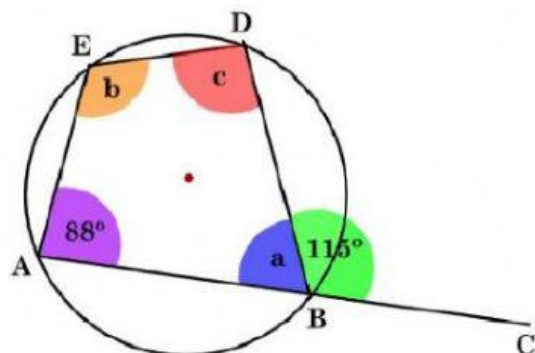
2.



Find the angles that are marked with a letter.

- | | | | |
|-------|--------|----------------------|----------|
| (i) | $y =$ | <input type="text"/> | $^\circ$ |
| (ii) | $x =$ | <input type="text"/> | $^\circ$ |
| (iii) | $3x =$ | <input type="text"/> | $^\circ$ |

3.



Find the angles that are marked with a letter.

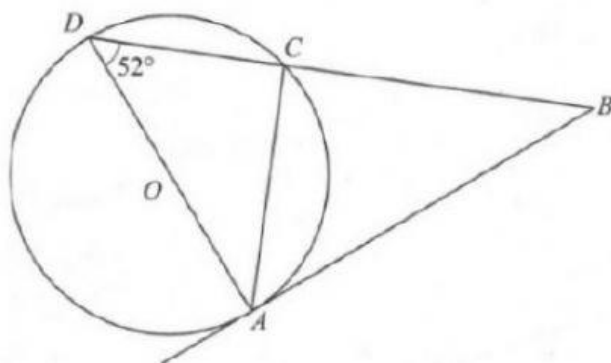
(i) $a =$ $^{\circ}$

(ii) $b =$ $^{\circ}$

(iii) $c =$ $^{\circ}$

4.

In the diagram, O is the centre of the circle. AB is tangent to the circle at A and $\angle ADB = 52^{\circ}$.



NOT TO SCALE

Calculate the value of

(i) $\angle CAD, =$ $^{\circ}$

(ii) $\angle CAB, =$ $^{\circ}$

(iii) $\angle CBA, =$ $^{\circ}$

