Name:

Exam Style Questions

Circle Theorems

Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

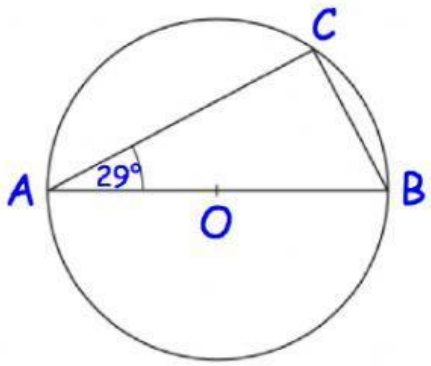
Video 64

Video 65

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LIVEWORKSHEETS

1. (a) In the diagram below, O is the centre of the circle and A, B and C are points on the circumference.



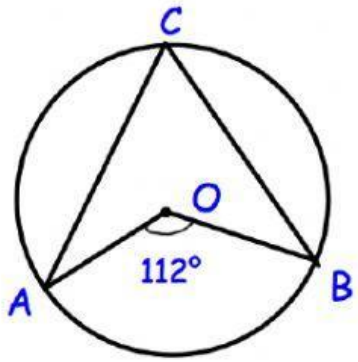
Angle A = 29°

Work out the size of angle B.

.....°

(1)

(b) A, B and C are three points on the circumference of another circle.
O is the centre of the circle.



Angle AOB = 112°

Work out the size of angle ACB.

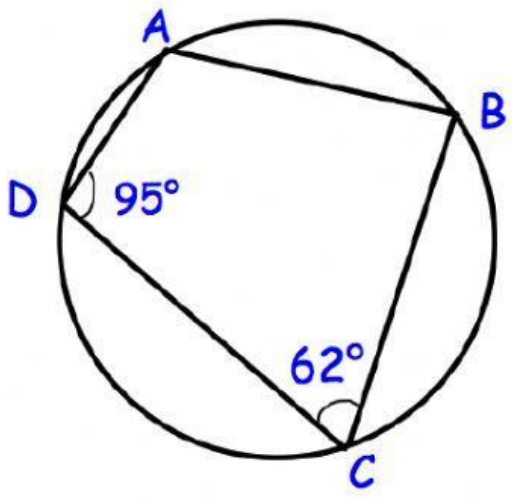
.....°

(1)

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LIVEWORKSHEETS

2. A, B, C and D are points on the circumference on a circle.



(a) Find the size of angle DAB.

.....°

(1)

(b) Find the size of angle ABC.

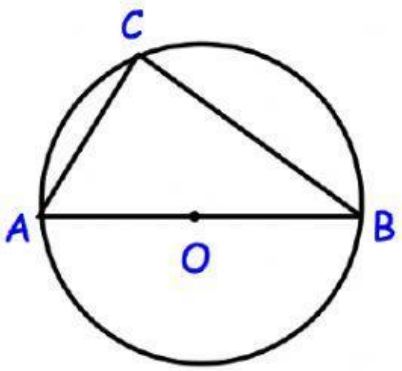
.....°

(1)

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LIVEWORKSHEETS

3. A circle with centre O, has points A, B and C on the circumference.
Angle ABC = 20°



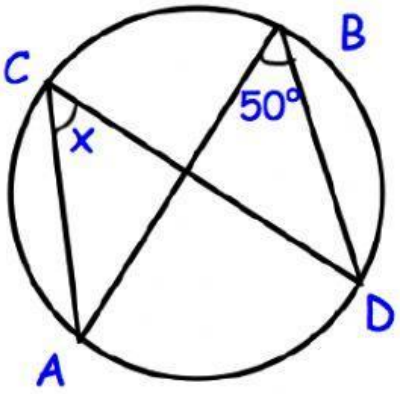
Find the size of angle BAC.

.....°

(1)

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4. A, B, C and D are points on the circumference of a circle.



Find x, the size of angle ACD.

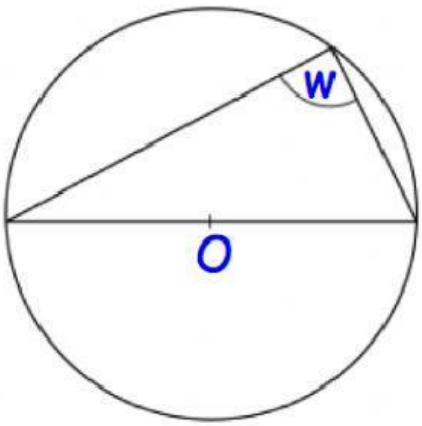
.....°

(1)

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LIVEWORKSHEETS

5. (a) In the diagram, O is the centre of the circle.

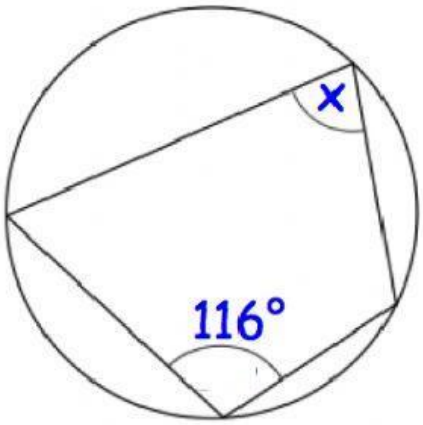


Write down the value of w.

.....°

(1)

(b)



Write down the value of x.

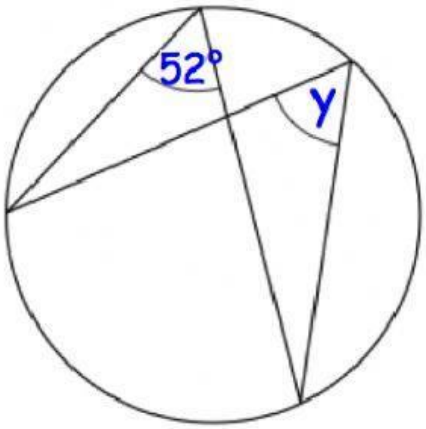
.....°

(1)

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LIVEWORKSHEETS

(c)

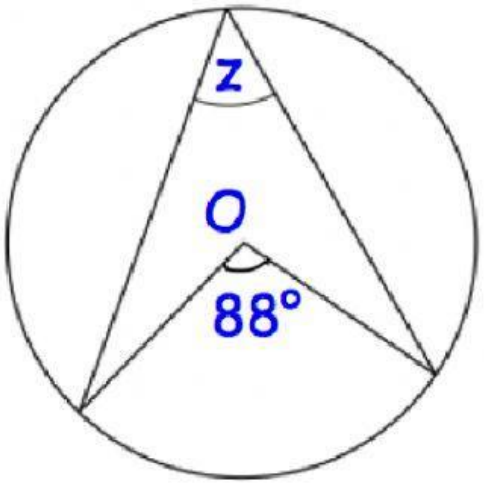


Write down the value of y.

.....°

(1)

(d) In the diagram, O is the centre of the circle.



Write down the value of z.

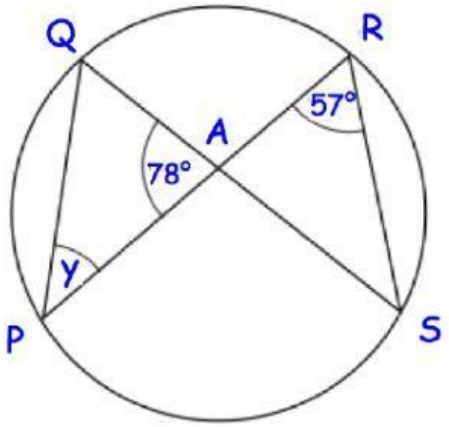
.....°

(1)

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LIVEWORKSHEETS

6. P, Q, R and S are four points on the circumference of a circle.
PR meets QS at A.
Angle PRS = 57° and Angle PAQ = 78°



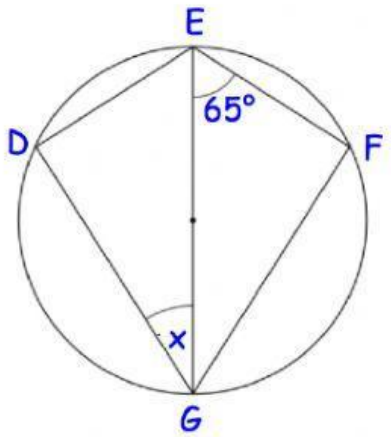
Work out the value of angle y.
Include your method.

.....°

(3)

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7. The diagram shows points D, E, F and G on the circumference of a circle.
EG is a diameter.
DEFG is a kite.



Work out the value of x.

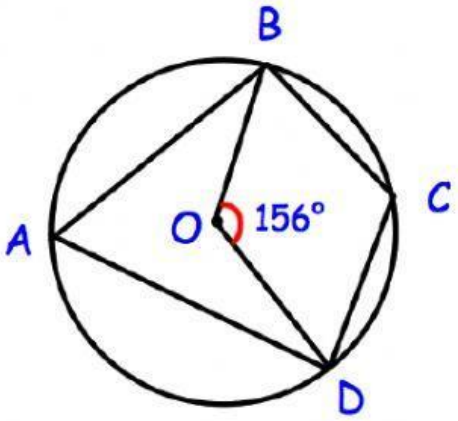
.....°

(2)

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LIVEWORKSHEETS

8. A, B, C and D are points on the circumference of a circle with centre O.



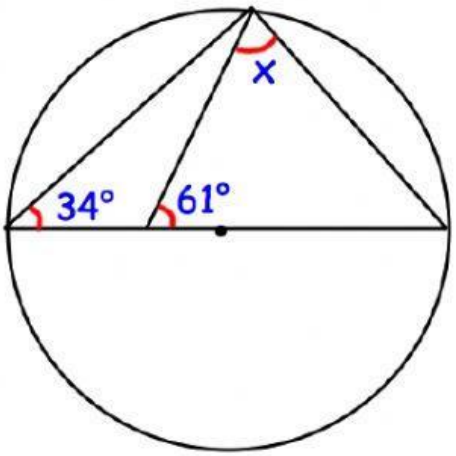
Work out the size of angle BCD.
You must show your workings.

.....°

(4)

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9. AB is the diameter of a circle.



Work out the value of x.

.....°

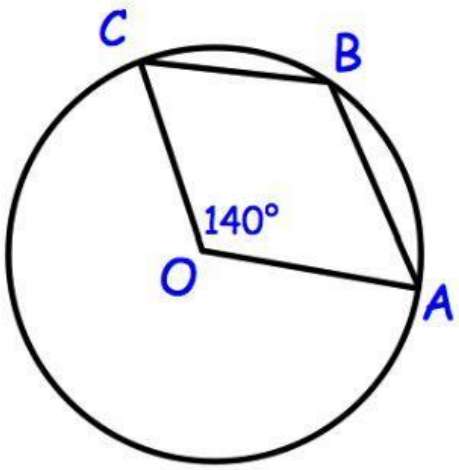
(3)

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LIVEWORKSHEETS

10. The diagram shows a circle, centre O.
A, B and C are points on the circumference of the circle.

Angle AOC is 140°



Explain why angle ABC is 110°

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(2)

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LIVEWORKSHEETS