

Circle Theorems

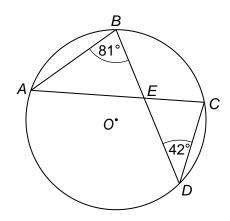




CHECK YOUR ANSWERS



1 A, B, C and D are points on a circle, centre O.



Write down the size of angle CAB. 1 (a)

[1 mark]

degrees Answer _

1 (b) Write down the size of angle *ACD*.

[1 mark]

Answer _ degrees

Write down the size of angle AEB. 1 (c)

[1 mark]

Answer ____ degrees

1 (d) Write down the size of angle BEC. [1 mark]

Answer degrees

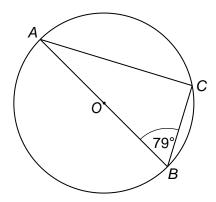








2 A, B, and C are points on a circle, centre O.

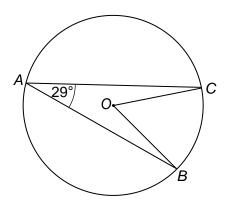


Work out the size of angle *CAB*. Give a reason for your answer.

[2 marks]

Reason

3 A, B, and C are points on a circle, centre O.



Work out the size of angle *COB*. Give a reason for your answer.

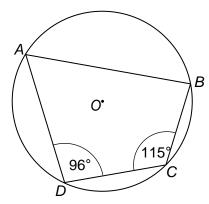
[2 marks]

Answer	degrees

Reason



4 A, B, C and D are points on a circle, centre O.



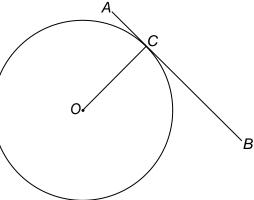
Work out the size of angle *ABC*. Give a reason for your answer.

[2 marks]

Answer	degrees
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Reason

5 A, B, and C are points on a circle, centre O. AB is a tangent.



Work out the size of angle *OCB*. Give a reason for your answer.

[2 marks]

Answer ______ degrees

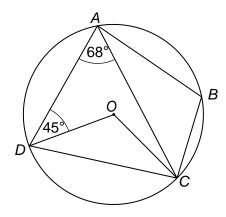
Reason _____



Turn over ►



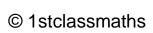
A, B, C and D are points on a circle, centre O. 6



Work out the size of angle <i>ABC</i> . Give reasons for your answer.	[4 marks]

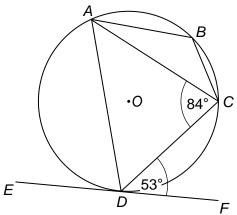
Answer degrees







7 A, B, C and D are points on a circle, centre O. EF is a tangent.



Work out the size of angle ABC.
Give reasons for your answer.

[4 marks]

Answer degrees

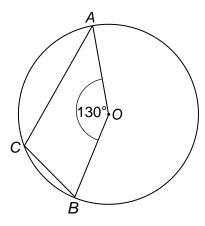


Turn over ▶





8 A, B, and C are points on a circle, centre O.



Work out the size of angle ACB.
Give reasons for your answer.

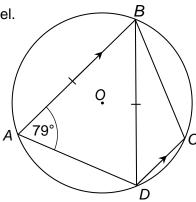
[3 marks]

Answer______degrees



9 A, B, C and D are points on a circle, centre O. BA = BD

AB and DC are parallel.



Work out the size of angle <i>DBC</i> . Give reasons for your answer.	[5 marks]

Answer degrees

8

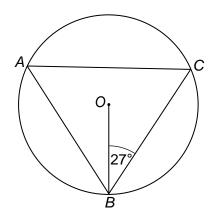
Turn over ▶







A, B, and C are points on a circle, centre O.

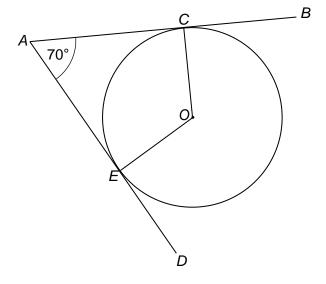


Work out the size of angle <i>BAC</i> . Give reasons for your answer.	[4 marks

Answer degrees



11 C and E are points on a circle, centre O. AB and AD are tangents.



11 (a)	Work out the size of angle COE.	

Answer	degrees

11 (b)	OC = 5 cm Work out the length of CA to 1 decimal place.	[2 marks]

Answer	cm



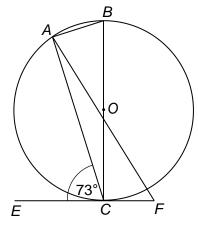
Solutions

Turn over ▶



12 A, B, and C are points on a circle, centre O. EF is a tangent.

Angle $FAB = 5 \times Angle CAF$.



Work out the size of angle <i>AFC</i> .	[4 marks]

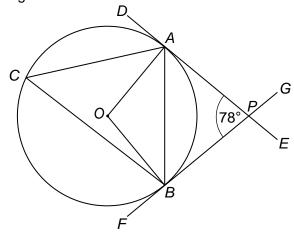


degrees

Answer



A, B, and C are points on a circle, centre O. DE and FG are tangents.



13 (a)	Work out the size of angle ACB.	[2 marks]
	Answer	degrees
13 (b)	Work out the size of angle ABP.	[2 marks]



Solutions Extended

Turn over ▶

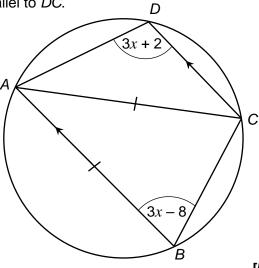
8

degrees

Answer

A, B, C and D are points on a circle, centre O. ABCD is a trapezium with AB parallel to DC.

AB = AC



Work out the size of angle DAC.

Answer

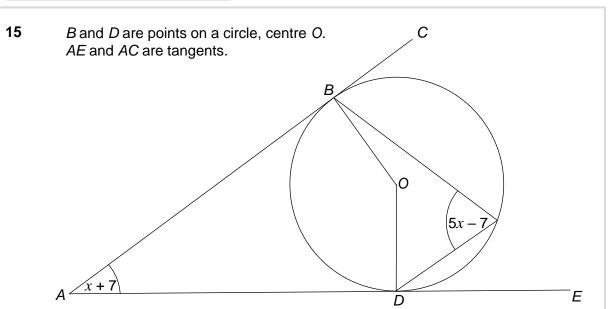
[5 marks]





degrees





15 (a)	Work out the value of <i>x</i>	[3 marks]

Answer degrees

15 (b)	AD = 30 cm Work out the length of OD to 3 significant figures.	[3 marks]

Answer _____ cm

