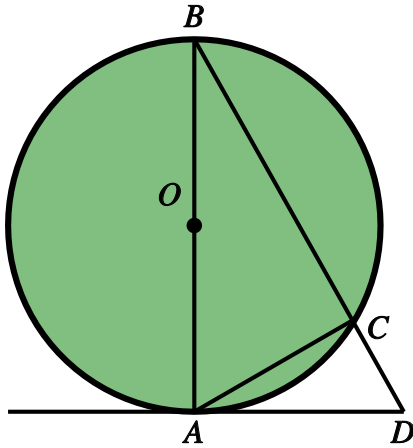


Circle Theorems (advanced) - no reasons required

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| Name: | Class: | Date: |
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|------|-----|---|
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|------|-----|---|

1) In the diagram below, angle $ABC = 38^\circ$.



Find the following angles

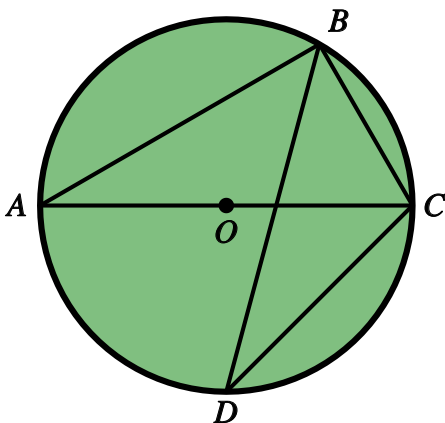
a) angle BAC

b) angle ADC

[1]

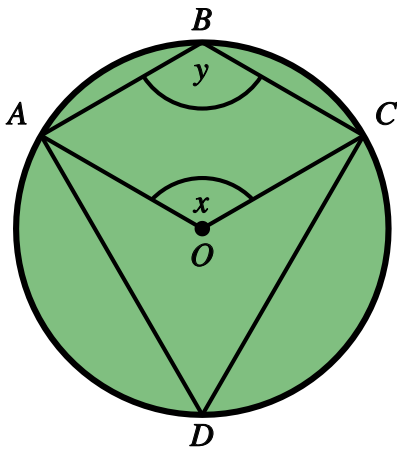
2) In the diagram below, angle $ACB = 34^\circ$.

[1]



Find angle BDC.

3) In the diagram below, angle $ADC = 40^\circ$.



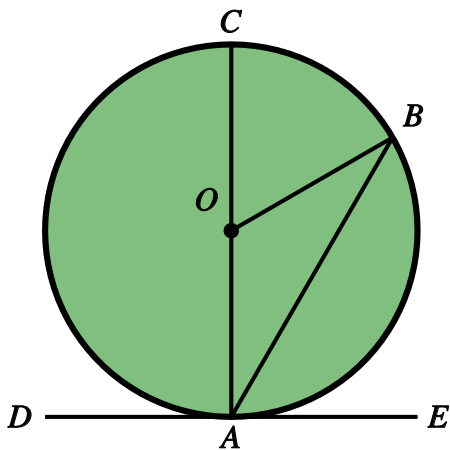
Find the following angles

a) angle x

b) angle y

[1]

4) In the diagram below, angle $BOC = 42^\circ$.



Find the following angles

a) angle DAC

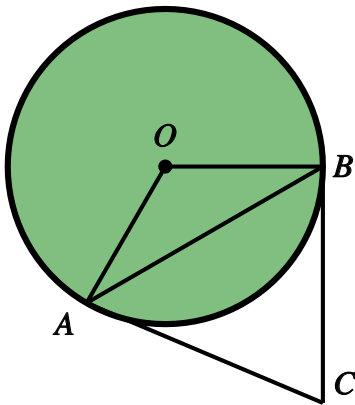
b) angle AOB

c) angle BAE

[1]

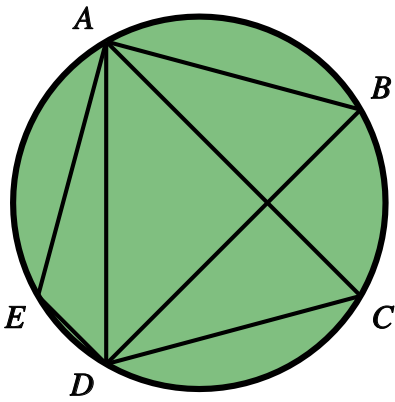
5) AB and BC are tangents to the circle shown below.
Angle $ACB = 59^\circ$.

[1]



Find angle OAB .

6) In the diagram below, angle $ABD = 89^\circ$.



Find the following angles

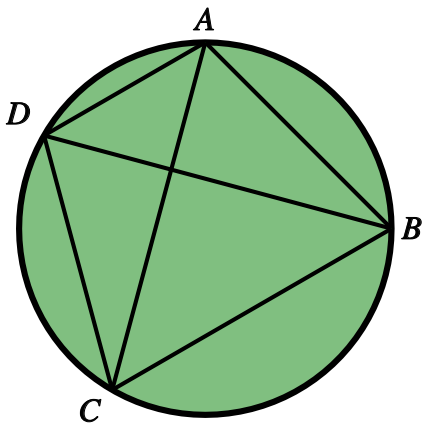
a) angle ACD

b) angle AED

[1]

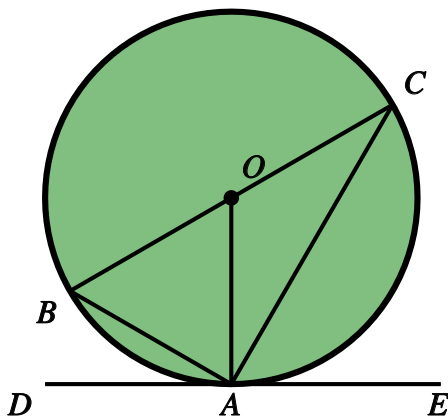
7) In the diagram below, angle $ADC = 98^\circ$ and angle $ACD = 32^\circ$.

[1]



Find angle DBC .

8) In the diagram below, angle $CAE = 38^\circ$.



Find the following angles

a) angle OCA

b) angle DAB

[1]

Solutions for the assessment Circle Theorems (advanced) - no reasons required

- 1) a) angle $BAC = 52^\circ$
b) angle $ADC = 52^\circ$

2) angle $BDC = 56^\circ$

- 3) a) angle $x = 80^\circ$
b) angle $y = 140^\circ$

- 4) a) angle $DAC = 90^\circ$
b) angle $AOB = 138^\circ$
c) angle $BAE = 69^\circ$

5) angle $OAB = 29.5^\circ$

- 6) a) angle $ACD = 89^\circ$
b) angle $AED = 91^\circ$

7) angle $DBC = 50^\circ$

- 8) a) angle $OCA = 52^\circ$
b) angle $DAB = 52^\circ$