Parallel Lines

Question Paper
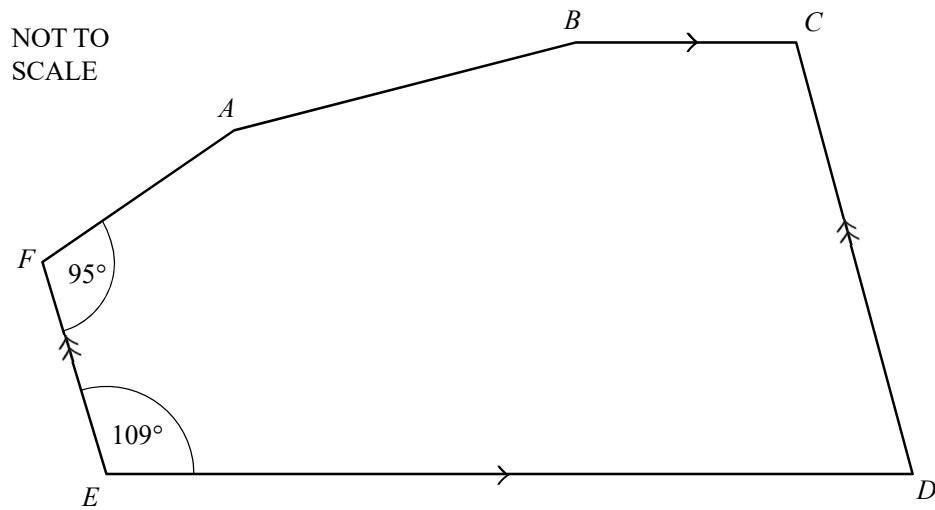
NOT TO
SCALE

In the hexagon *ABCDEF*, *BC* is parallel to *ED* and *DC* is parallel to *EF*.
Angle *DEF* = 109° and angle *EFA* = 95°.
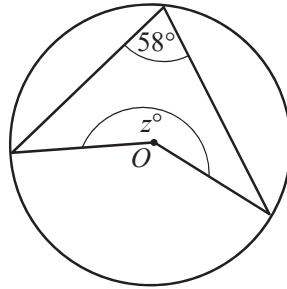Angle *FAB* is equal to angle *ABC*.
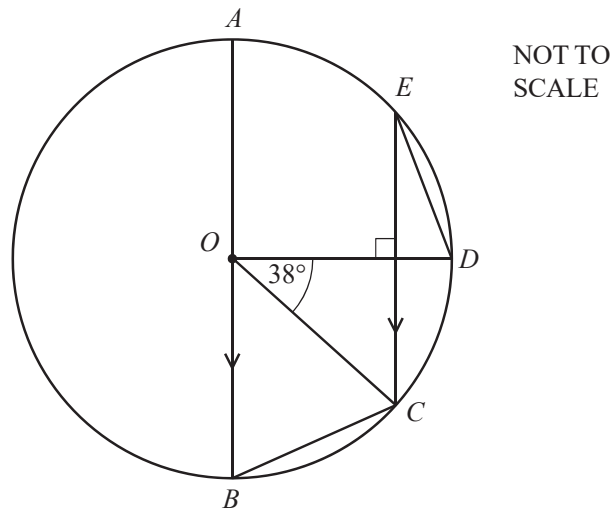Find the size of

(a) angle *EDC*,

[1]

(b) angle *FAB*.

[2]

(c)

NOT TO
SCALE

The diagram shows a circle, centre O.

Find the value of z.

[2]

NOT TO SCALE

AB is the diameter of a circle, centre *O*. *C*, *D* and *E* lie on the circle.
EC is parallel to *AB* and perpendicular to *OD*. Angle *DOC* is 38°.

Work out

(a) angle *BOC* ,   [1]

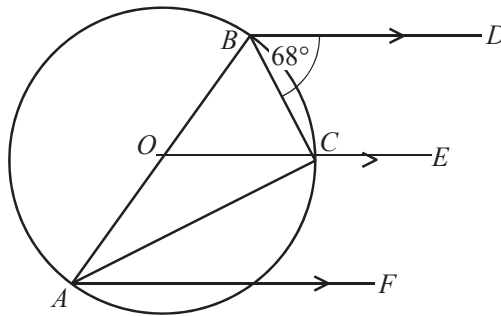(b) angle *CBO*,   [1]

(c) angle *EDO* .   [2]

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Points *A*, *B* and *C* lie on a circle, centre *O*, with diameter *AB*.
BD, *OCE* and *AF* are parallel lines.
Angle *CBD* = 68°.

Calculate
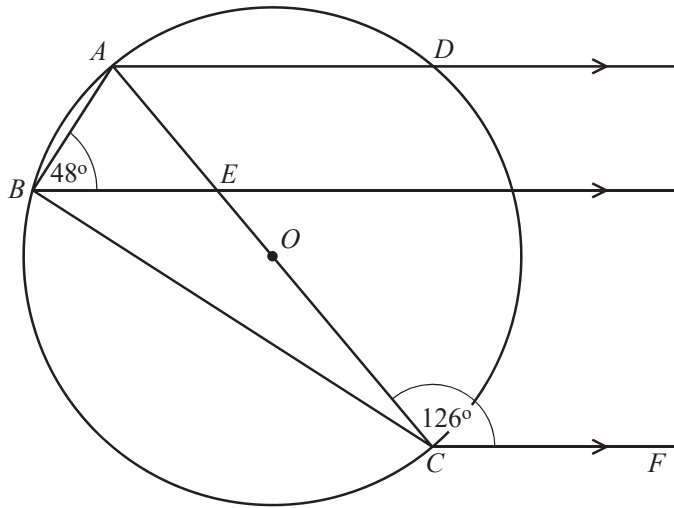
(a) angle *BOC*,

[2]

(b) angle *ACE*.

[2]
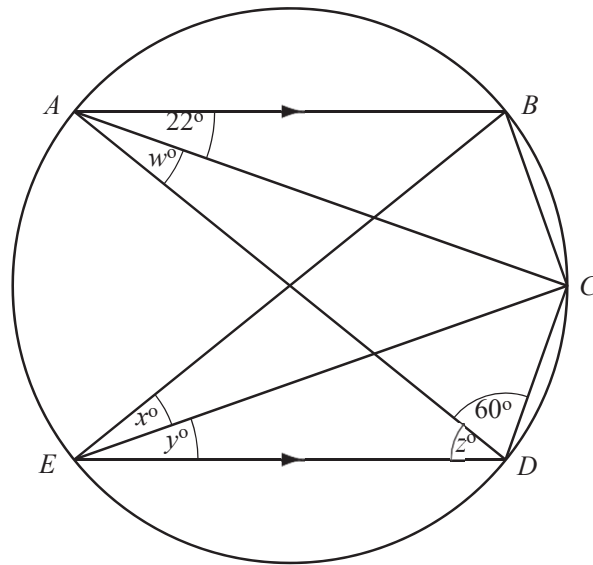
NOT TO
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AD is a diameter of the circle *ABCDE*.
Angle *BAC* = 22° and angle *ADC* = 60°.
AB and *ED* are parallel lines.
Find the values of *w*, *x*, *y* and *z*.

[4]

NOT TO
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A, B, C and D lie on a circle centre O. AC is a diameter of the circle.
AD, BE and CF are parallel lines. Angle $ABE = 48°$ and angle $ACF = 126°$.
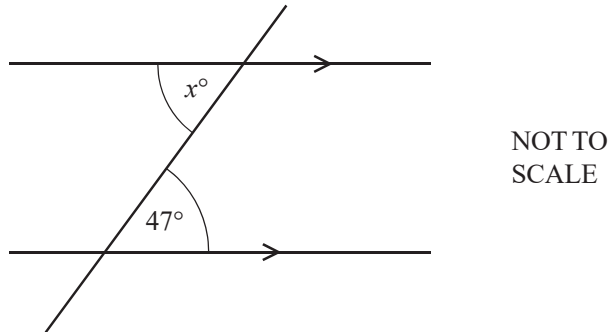Find

(a) angle DAE,
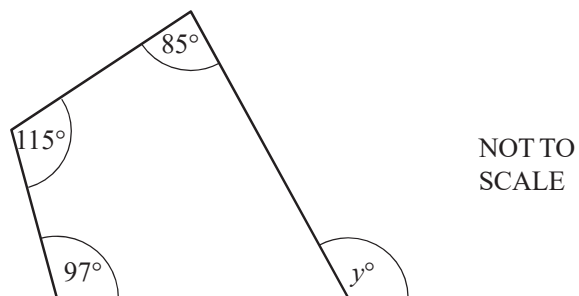
[1]

(b) angle EBC,

[1]

(c) angle BAE.

[1]

(a)

NOT TO
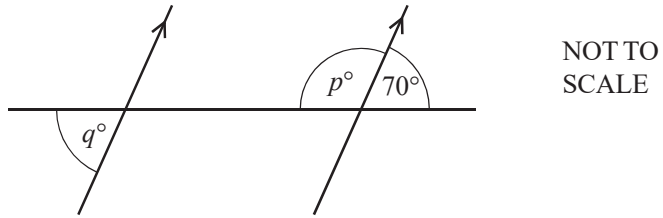SCALE

Find the value of x. [1]

(b)
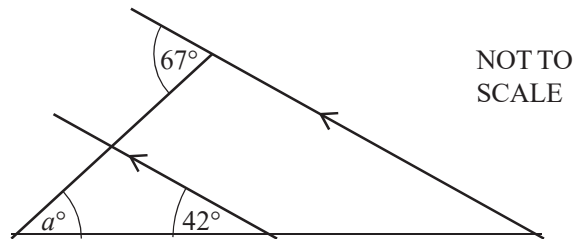

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Find the value of y. [2]

NOT TO
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The diagram shows a straight line intersecting two parallel lines.
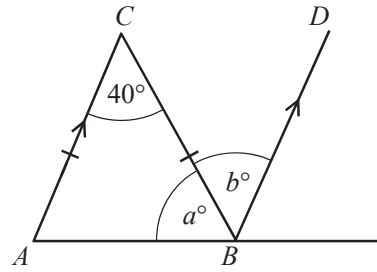
Find the value of p and the value of q. [2]

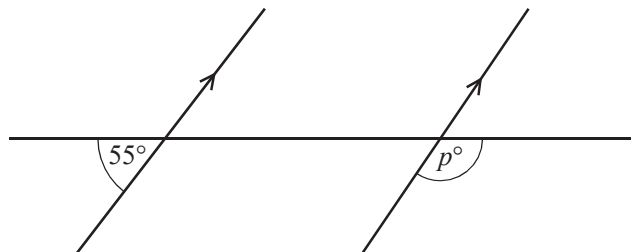**Question 8**

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Find the value of a. [2]

NOT TO
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Triangle *ABC* is isosceles and *AC* is parallel to *BD*.

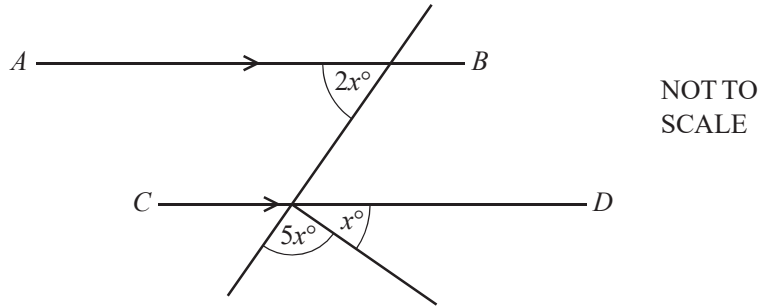Find the value of *a* and the value of *b*.

[2]

Question 10

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Find the value of *p*.   [2]

AB is parallel to *CD*.
Calculate the value of *x*.   [3]

NOT TO
SCALE