1. Question | 0607 Feb-March 2025 P2 V2 Q3

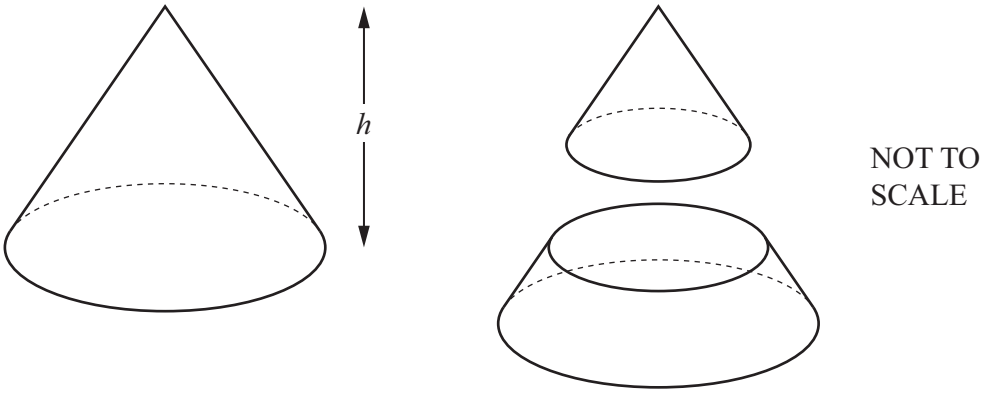
3 Draw an angle of 215° at A.



[1]

2. Question | 0607 Feb-March 2025 P2 V2 Q19

19



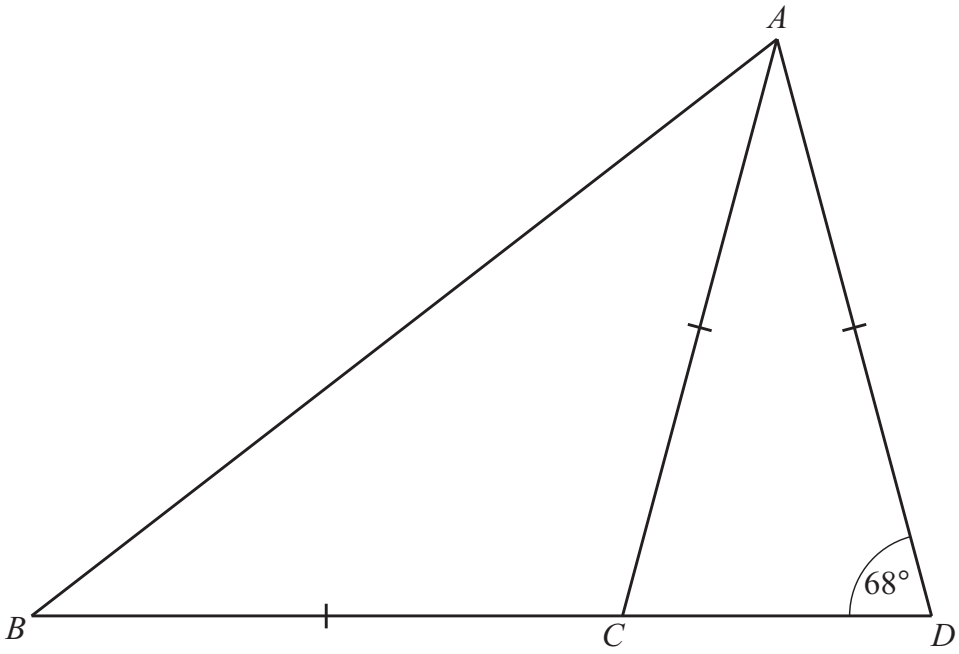
A large cone has height h.
The large cone is cut parallel to its base to make a smaller cone and a frustum.
The height of the frustum is $\frac{3}{5}h$.

Find the ratio volume of small cone : volume of frustum.

..... : ..... [3]

3. Question | 0607 May-June 2025 P2 V1 Q3

3



NOT TO SCALE

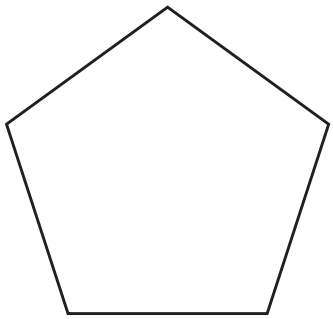
In the diagram $AC = BC = AD$.
BCD is a straight line.

Find angle BAC.

Angle $BAC =$ ..... [2]

4. Question | 0607 May-June 2025 P2 V1 Q4

4 **(a)**



Draw all the lines of symmetry of this regular pentagon. [1]

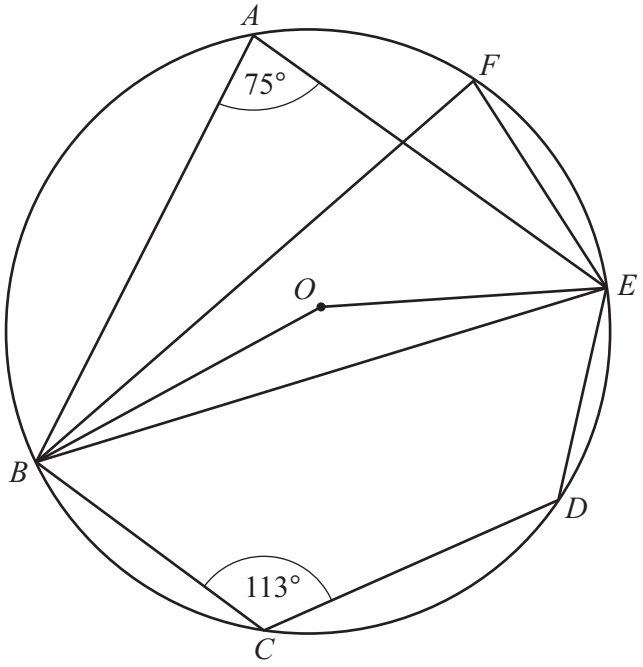
(b) A quadrilateral has rotational symmetry of order 2 and no lines of symmetry.

Write down the mathematical name of this quadrilateral.

..... [1]

5. Question | 0607 May-June 2025 P2 V1 Q13

13



NOT TO SCALE

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

(a) Find angle BFE.

Angle BFE = ... [1]

(b) Find angle BED.

Angle BED = ... [1]

(c) Find reflex angle BOE.
Give geometrical reasons for your answer.

Angle BOE = ... Reasons .....

.....

..... [3]

6. Question | 0607 May-June 2025 P2 V2 Q5

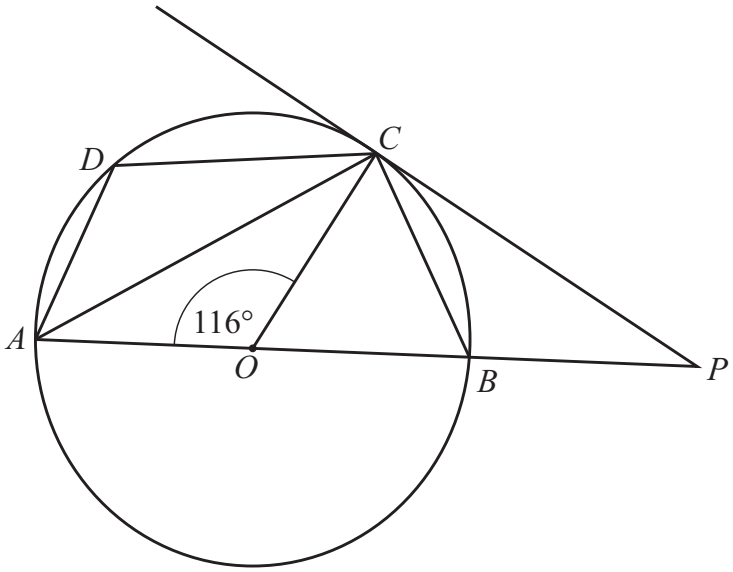
5 A quadrilateral has exactly one pair of parallel sides.

Write down the mathematical name of this quadrilateral.

..... [1]

7. Question | 0607 May-June 2025 P2 V2 Q17

17



NOT TO SCALE

The diagram shows a circle, centre O.
$AOBP$ is a straight line.
PC is a tangent to the circle.
Angle $AOC = 116°$.

Find

(a) angle OAC

Angle $OAC =$ ..... [1]

(b) angle ABC

Angle $ABC =$ ..... [1]

(c) angle ADC

Angle $ADC =$ ..... [1]

(d) angle APC.

Angle $APC =$ ..... [2]

8. Question | 0607 May-June 2025 P2 V3 Q4

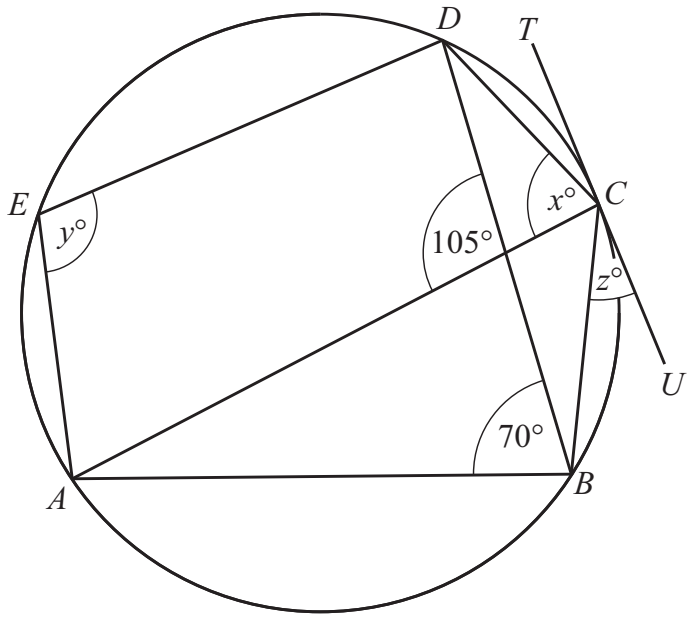
4 A regular polygon has 20 sides.

Work out the size of one interior angle of the polygon.

..... [3]

9. Question | 0607 May-June 2025 P2 V3 Q10

10



NOT TO SCALE

A, B, C, D and E lie on the circle.
TU is a tangent to the circle at C.

Find the values of x, y and z.

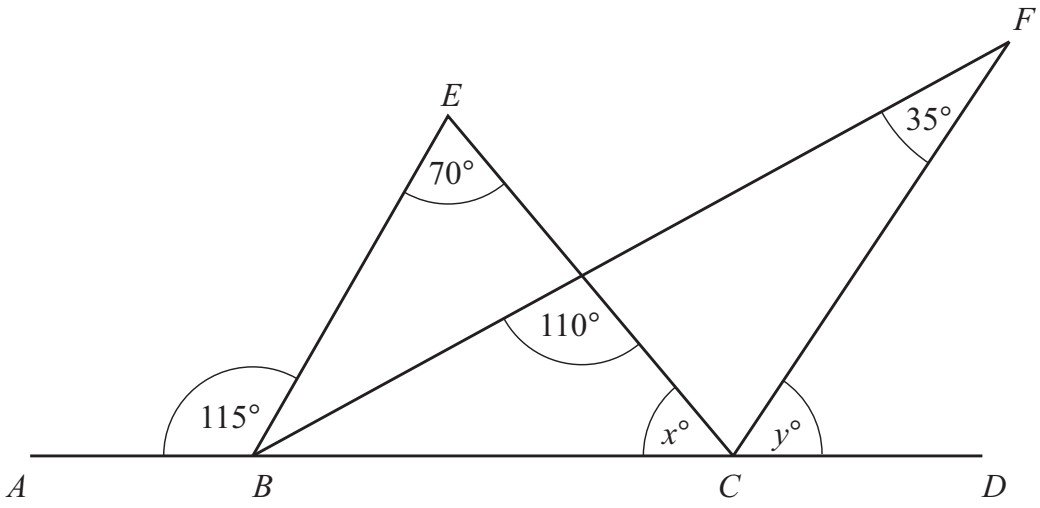
$x =$ .....

$y =$ .....

$z =$ .....

[4]

4



NOT TO SCALE

ABCD is a straight line.

(a) **(i)** Find the value of x.

..... [1]

(ii) Find the value of y.

..... [2]

(b) Give a reason why *BE* is **not** parallel to *CF*.

.....

..... [1]

11. Question | 0607 Oct-Nov 2025 P2 V1 Q7

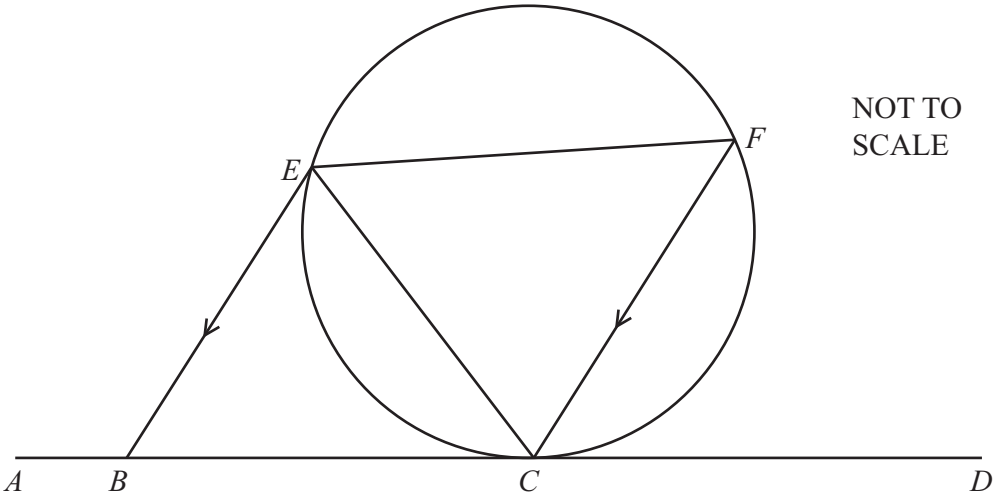
7 A quadrilateral has exactly one line of symmetry.
It has no pairs of parallel sides.

Write down the mathematical name for this quadrilateral.

..... [1]

12. Question | 0607 Oct-Nov 2025 P2 V1 Q18

18



C, E and F are points on a circle.
$ABCD$ is a tangent to the circle at C.
EB is parallel to FC.

(a) Show that triangle CEB is similar to triangle FCE.

.....

.....

.....

.....

..... [3]

(b) $CB = 6\,\text{cm}$, $FE = 8\,\text{cm}$ and $EB = 5\,\text{cm}$.

Calculate CE.

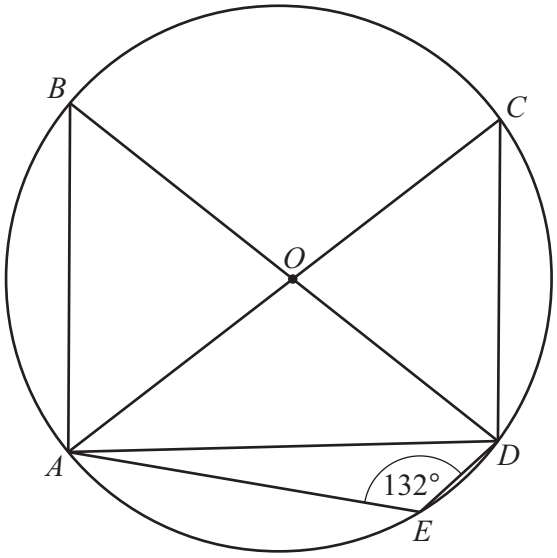
..... cm [2]

(c) Find $\dfrac{\text{Area of triangle } CEB}{\text{Area of triangle } FCE}$.

..... [1]

13. Question | 0607 Oct-Nov 2025 P2 V2 Q14

14



NOT TO SCALE

A, B, C, D and E lie on a circle, centre O.
AC and BD are diameters of the circle.
Angle $AED = 132°$.

(a) Find

(i) angle ABD

Angle $ABD =$ ..... [1]

(ii) angle AOD

Angle $AOD =$ ..... [1]

(iii) angle ADB

Angle $ADB =$ ..... [1]

(iv) angle DCA.

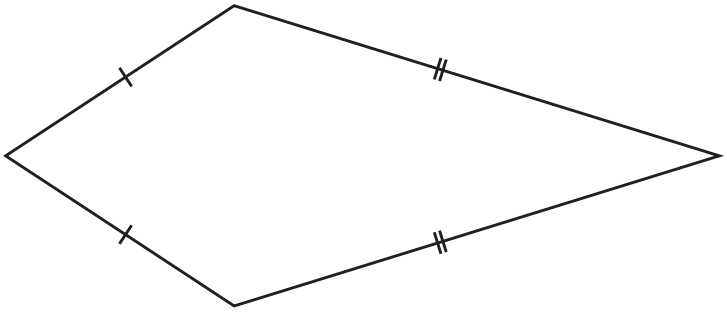
Angle $DCA =$ ..... [1]

(b) Write down two triangles that are congruent.

..... [1]

14. Question | 0607 Oct-Nov 2025 P2 V3 Q1

1



(a) Write down the mathematical name of this quadrilateral.

..... [1]

(b) Draw any lines of symmetry in the quadrilateral. [1]

15. Question | 0607 Oct-Nov 2025 P2 V3 Q8

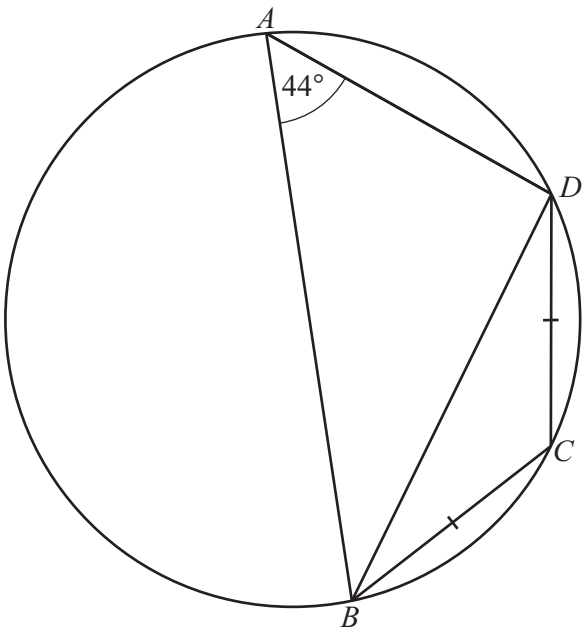
8 The interior angle of a regular polygon is 168°.

Work out the number of sides of this polygon.

..... [2]

16. Question | 0607 Oct-Nov 2025 P2 V3 Q10

10



NOT TO SCALE

A, B, C, and D lie on the circle.
$BC = CD$.

(a) Work out angle CDB.

Angle CDB = ... [2]

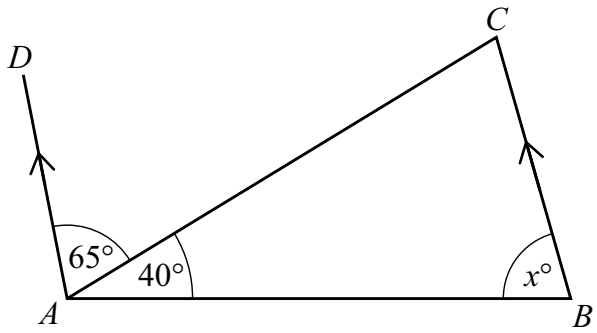
(b) Explain why the line AC bisects angle BAD.

.....

..... [2]

17. Question | 0607 Specimen 2025 P2 Q1

1



NOT TO SCALE

In the diagram, BC is parallel to AD.

Find the value of x.

$x =$ ..... [2]

18. Question | 0607 Specimen 2025 P2 Q3

3 A quadrilateral has

- exactly 2 lines of symmetry

and

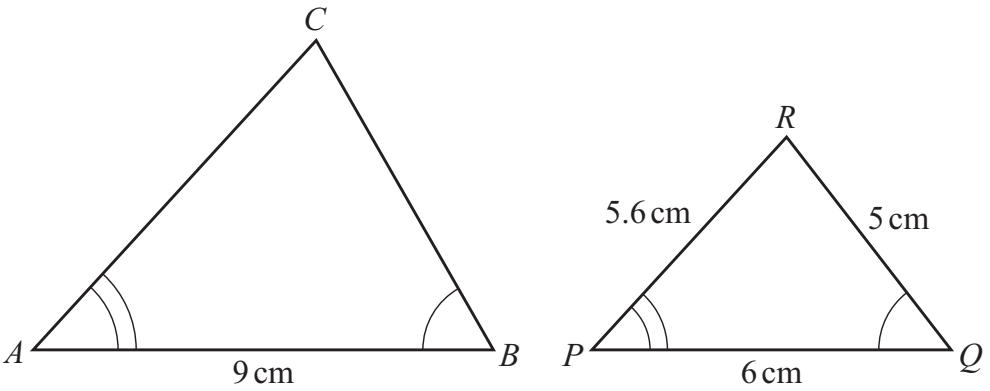
- rotational symmetry of order 2.

Write down the mathematical name of the quadrilateral.

..... [1]

19. Question | 0607 Specimen 2025 P2 Q6

6



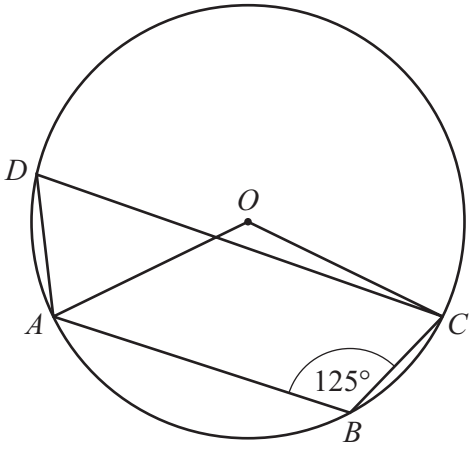
NOT TO SCALE

Triangles ABC and PQR are similar.

Work out the length of AC.

$AC =$ ..... cm [2]

14



NOT TO SCALE

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

Work out obtuse angle AOC.
Give a geometric reason for each step of your working.

.....

.....

.....

..... [4]

21. Question | 0607 Feb-March 2026 P2 V2 Q10

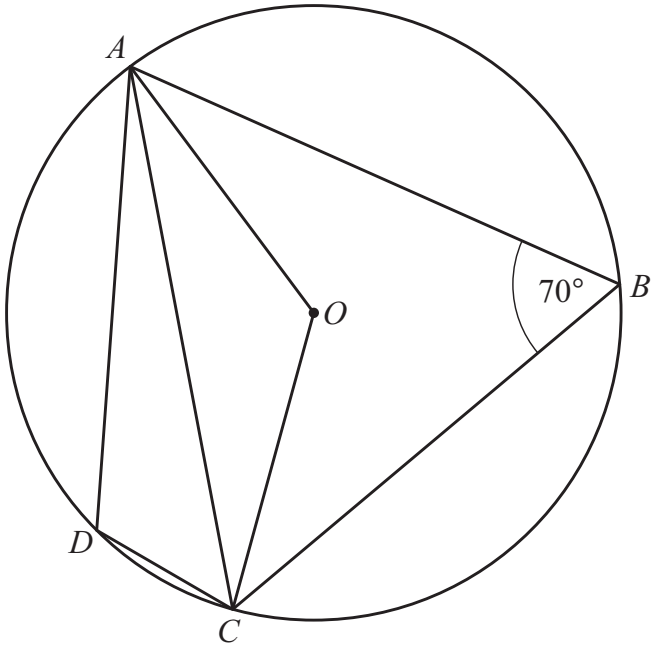
10 The interior angle of a regular polygon is 168°.

Find the number of sides of the polygon.

..... [2]

22. Question | 0607 Feb-March 2026 P2 V2 Q11

11



NOT TO SCALE

A, B, C and D are points on the circle, centre O.
Angle $ABC = 70°$.

Complete these statements giving geometrical reasons for your answers.

Angle $ADC =$ ..... because .....

.....

Angle $ACO =$ ..... because .....

.....

.....

.....

[6]

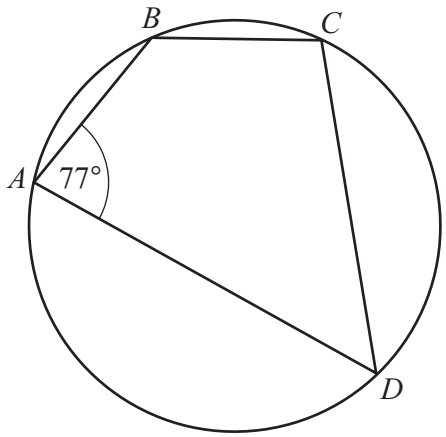
23. Question | 0607 May-June 2026 P2 V1 Q6

6 Work out the size of an interior angle of a regular decagon.

..... [2]

24. Question | 0607 May-June 2026 P2 V1 Q13

13 **(a)** A, B, C and D are points on a circle.



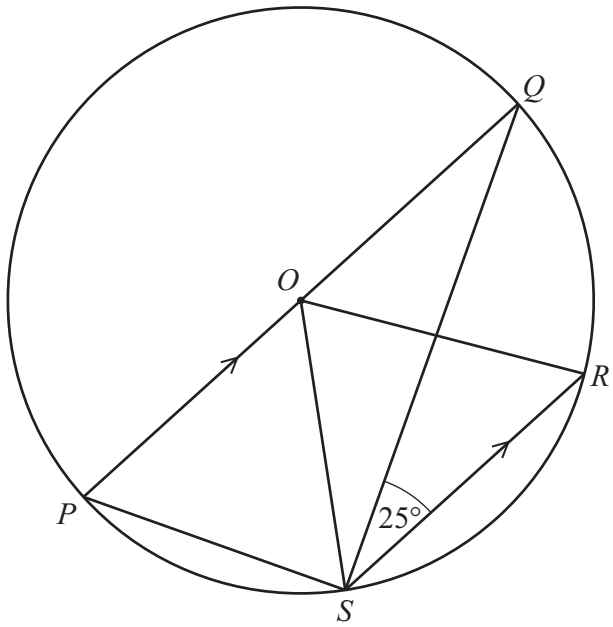
NOT TO SCALE

Complete the sentence giving a geometrical reason for your answer.

Angle BCD = ... because .....

..... [2]

(b) P, Q, R and S are points on the circle centre O.



NOT TO SCALE

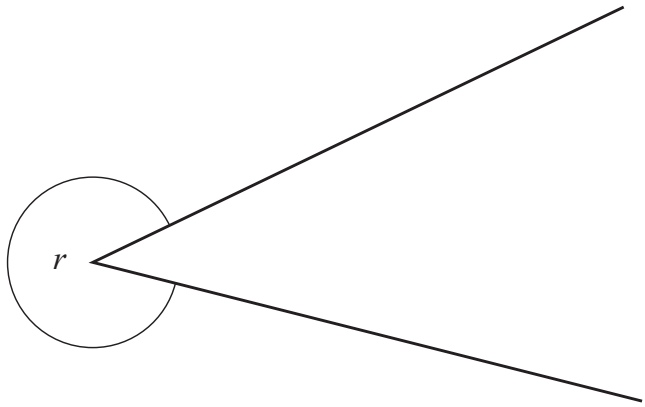
Angle $QSR = 25°$.
POQ is parallel to SR.

Find angle SOR.

angle SOR = ... [3]

25. Question | 0607 May-June 2026 P2 V2 Q1

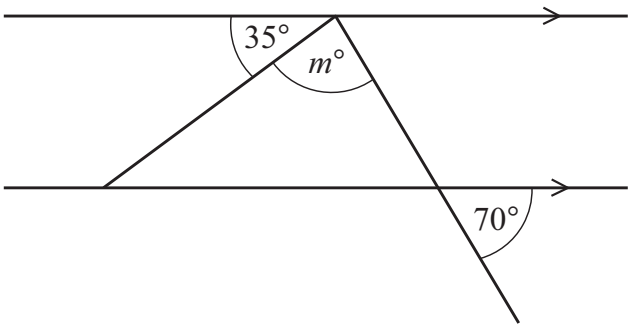
1 (a)



Measure the reflex angle r.

$r =$ ..... [1]

(b) The diagram shows two straight lines intersecting two parallel lines.



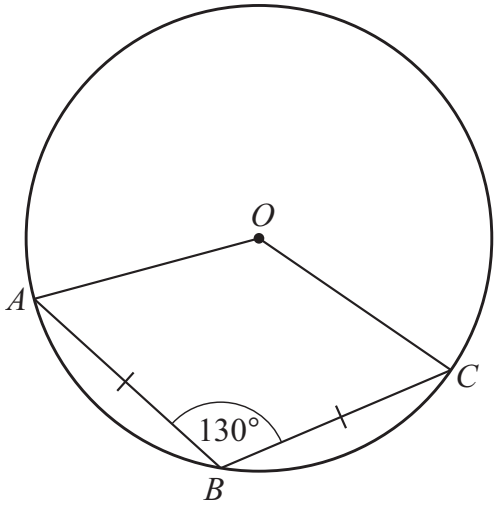
NOT TO SCALE

Work out the value of m.

$m =$ ..... [2]

26. Question | 0607 May-June 2026 P2 V2 Q10

10



NOT TO SCALE

A, B and C lie on the circle centre O.
$AB = BC$ and angle $ABC = 130°$.

Find angle OAB.

angle OAB = ... [3]

27. Question | 0607 May-June 2026 P2 V3 Q2

2 All sides of a parallelogram are the same length.
The angles of the parallelogram are **not** all equal.

Write down the mathematical name of this parallelogram.

..... [1]

28. Question | 0607 May-June 2026 P2 V3 Q8

8 **(a)** Find the sum of the interior angles of an octagon.

..... [2]

(b) The interior angle of a regular polygon is $a°$.

Find, in terms of a, the number of sides of the polygon.

..... [2]