

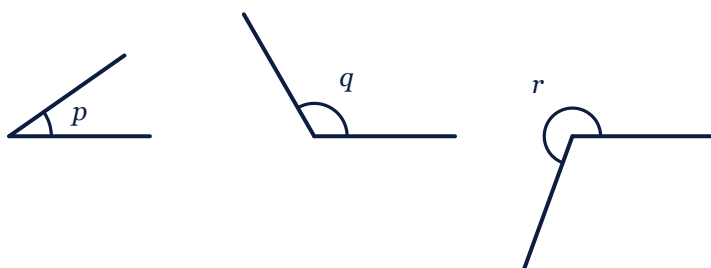


Scan for the solutions

Name: _____ **Date:** _____ **Score:** _____ / 38

1 Here are three angles, p , q and r .

For each angle, write down whether it is acute, obtuse or reflex, and estimate its size in degrees.

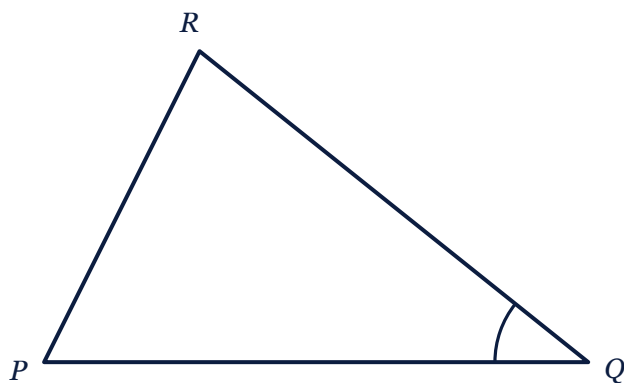


(3 marks)

Answer _____

2 The diagram shows triangle PQR. One angle is marked.

- Use three letters to name the marked angle.
- Use two letters to name the longest side of the triangle.
- Use three letters to name the angle at vertex R.
- The side opposite angle P is called side p . Use two letters to name side p .

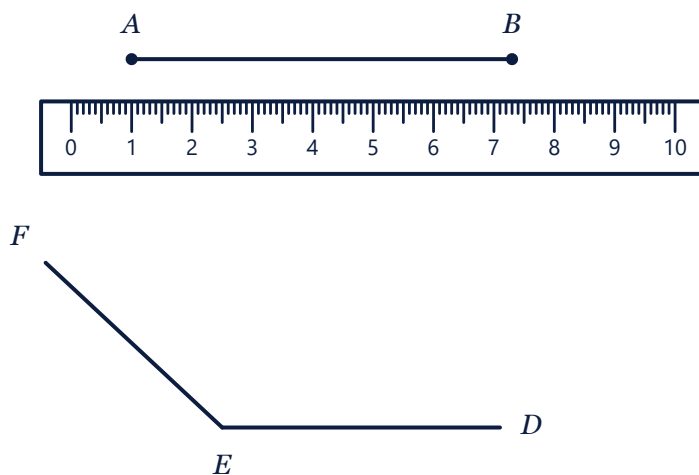


(4 marks)

Answer _____

3

- a. The diagram shows line AB above a ruler marked in centimetres and millimetres. Write down the length of AB to the nearest millimetre.
- b. Use a protractor to measure angle DEF.



(2 marks)

Answer _____

4

- a. At A, draw an angle of 65° above the line AB.
- b. At C, draw an angle of 270° measured anticlockwise from the line CD (a three-quarter turn).

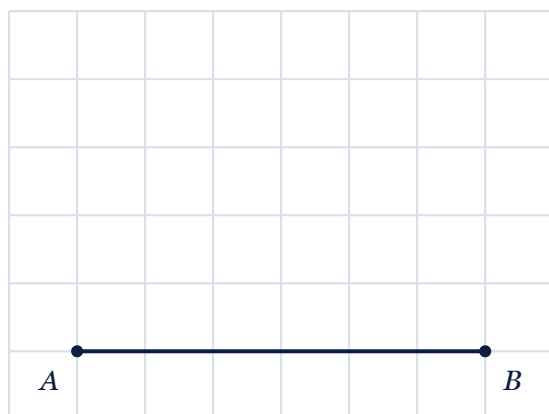


(2 marks)

Answer _____

5 The grid is made of centimetre squares.

- Draw triangle ABC where $AB = 6$ cm, angle $BAC = 90^\circ$ and $AC = 4$ cm. C is above A.
- Measure angle ABC in your triangle.



(3 marks)

Answer _____

6 Three angles meet at a point. Two of the angles are 145° and 118° . The third angle is x° .

Work out the value of x . Give a reason for your answer.

(2 marks)

Answer _____

7

Two straight lines cross. One angle is 38° .

Work out the sizes of the angles marked a , b and c . Give a reason for each answer.

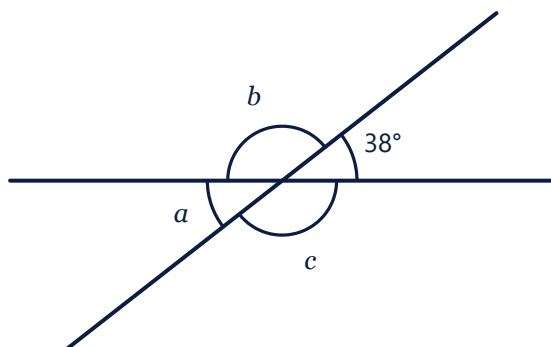


Diagram NOT accurately drawn

(3 marks)

Answer _____

8

Write down the mathematical name of each shape.

- A quadrilateral with four equal sides and four right angles.
- A quadrilateral with four equal sides and no right angles.
- A quadrilateral with exactly one pair of parallel sides.
- A quadrilateral with two pairs of equal sides next to each other, and one line of symmetry.
- A triangle with exactly two equal sides and two equal angles.

(4 marks)

Answer _____

- 9 Work out the sizes of the angles marked x , y and z .

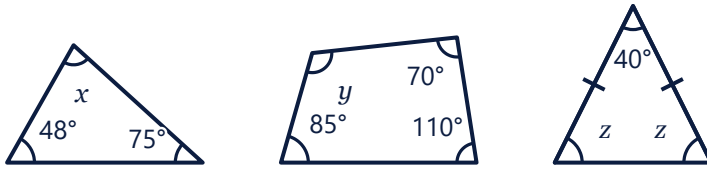


Diagram NOT accurately drawn

(4 marks)

Answer _____

- 10 ABC is a straight line. The point D lies above the line.

Triangle BCD is isosceles with $BD = CD$.

Angle $DBA = 134^\circ$.

Work out the size of angle BDC . Give a reason for each stage of your working.

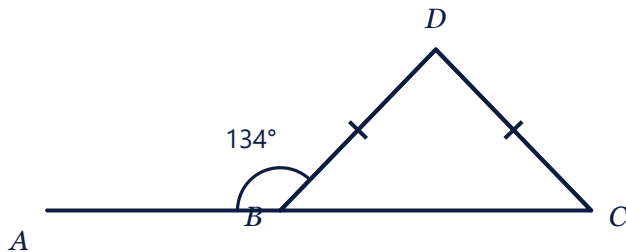


Diagram NOT accurately drawn

(4 marks)

Answer _____

11

In triangle ABC, the side BC is extended to D.

The angles inside the triangle are a , b and c . The angle outside the triangle at C is d .

- Explain why $c + d = 180^\circ$
- Explain why $a + b + c = 180^\circ$
- Use parts (a) and (b) to show that $d = a + b$
- When $a = 50^\circ$ and $b = 65^\circ$, work out d .

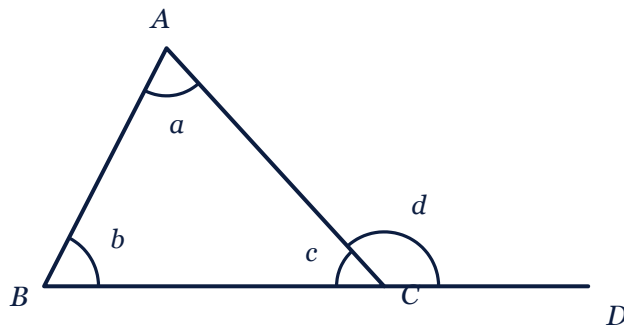


Diagram NOT accurately drawn

(4 marks)

Answer _____

- 12 The diagram shows triangle ABC. The line PQ goes through C and is parallel to AB.

Alternate angles between parallel lines are equal.

- Explain why angle p = angle x .
- Explain why angle q = angle y .
- Use the straight line PQ to prove that $x + y + z = 180^\circ$

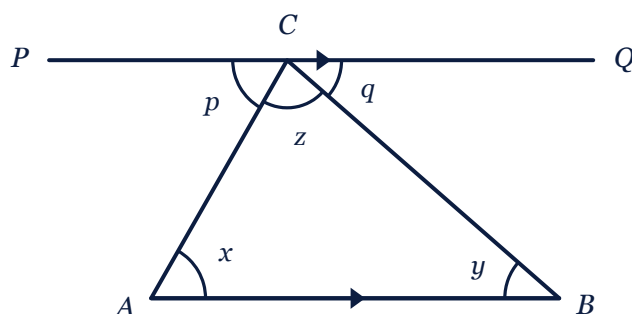


Diagram NOT accurately drawn

(3 marks)

Answer _____

End of questions | Total 38 marks