Geometry – properties of shapes

5.1

Total Marks (out of 20)	

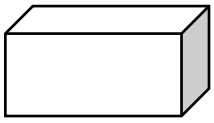
Name	
Date	

Section 1:

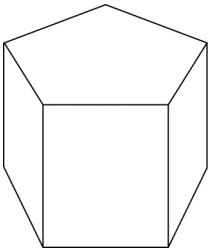
identify 3-D shapes, including cubes and other cuboids, from 2-D representations

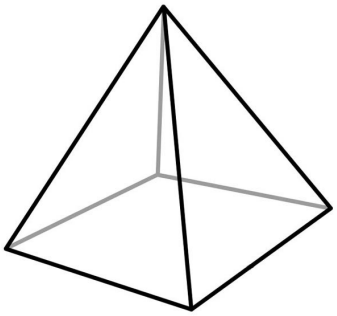
1

Shape A

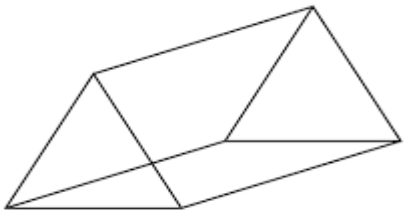


Shape B





Shape C



Shape D

Complete the table.

	Number of faces	Number of edges	Number of vertices	Name of shape
Shape A	6	12	8	cuboid
Shape B				
Shape C				
Shape D				

3 marks

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Section 2:

know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

2 Write the missing numbers

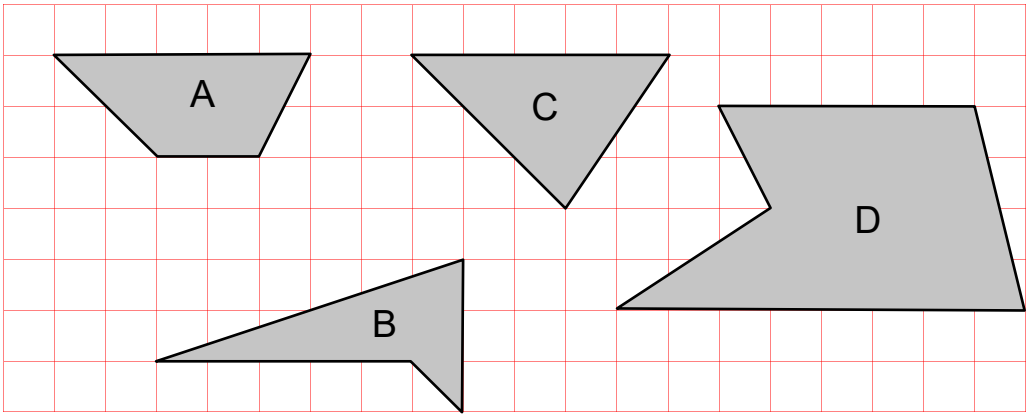
An angle less than ☐° is called an **acute** angle.

An angle more than ☐° but less than ☐° is called an **obtuse** angle.

An angle more than ☐° is called a **reflex** angle.

3 marks

3



Write the letters of **all** the shapes that have **three acute angles.**

1 mark

Write the letter of the shape that has **two obtuse angles.**

1 mark

Write the letters of **all** the shapes that have **a reflex angle.**

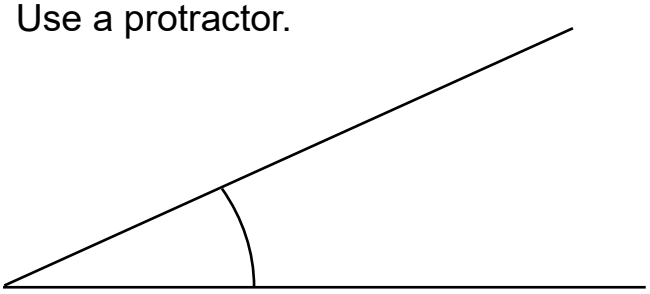
1 mark

Section 3:

draw given angles, and measure them in degrees

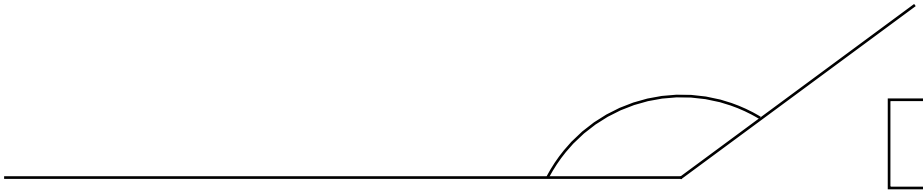
4 Measure the angles accurately.

Use a protractor.



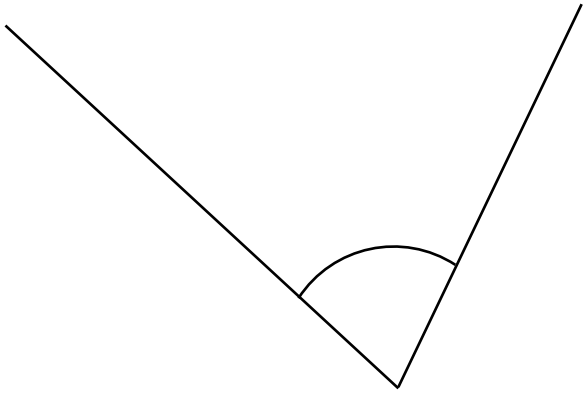
□°

1 mark



□°

1 mark



□°

1 mark

5 Draw an angle of 32°

Use a protractor and a ruler.

One line has been done for you.

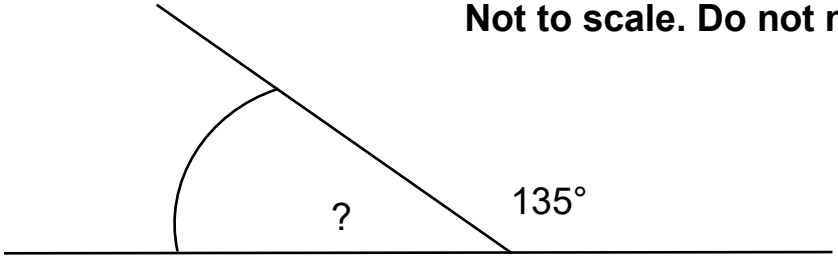
1 mark

Section 4:

identify: angles at a point and one whole turn, angles at a point on a straight line and 1/2 a turn, other multiples of 90 degrees

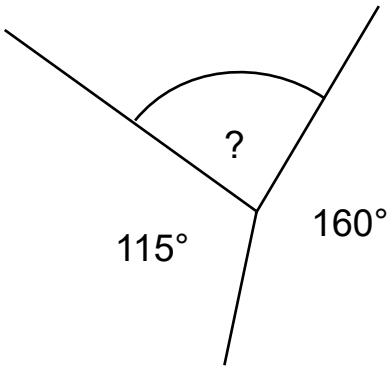
6 Calculate the missing angles.

Not to scale. Do not measure.



° _____

1 mark



Not to scale. Do not measure.

Show your method

° _____

2 marks

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Section 5:

use the properties of rectangles to deduce related facts and find missing lengths and angles

7 The **area** of this rectangle is **24 square cm**.

Not to scale. Do not measure.

Calculate the height of the rectangle.

cm

1 mark

8 The **perimeter** of this rectangle is **24 cm**.

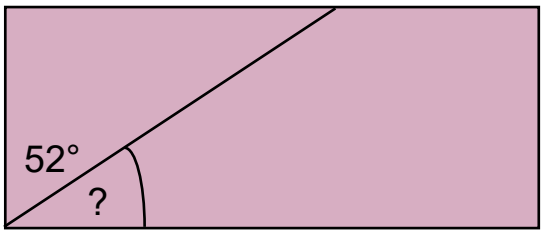
Not to scale. Do not measure.

Calculate the height of the rectangle.

cm

1 mark

9



Not to scale. Do not measure.

Calculate the missing angle.

°

1 mark

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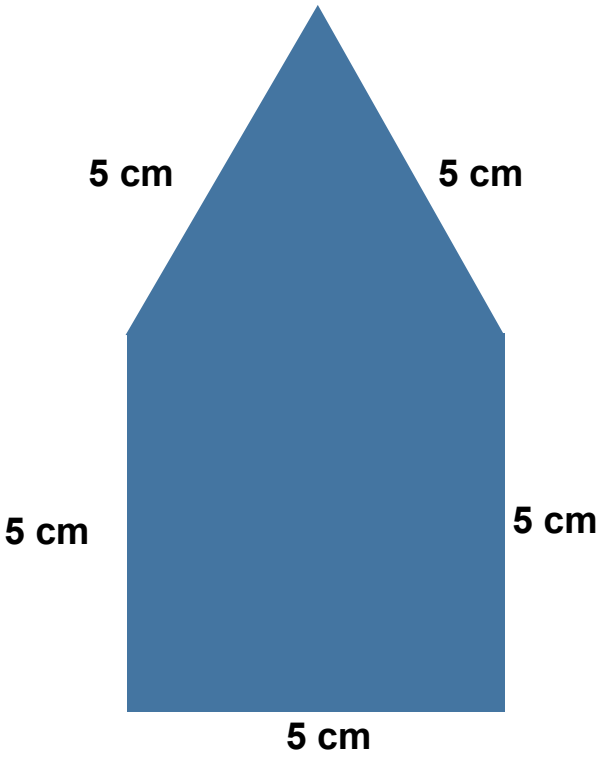
Section 6:

distinguish between regular and irregular polygons based on reasoning

10



Adam says, “This is a regular pentagon because all the sides are the same length.”

Explain why he is **wrong**.

1 mark

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