Year 5/6
Maths
Booklet 4

Date	
Subject/s	Maths
Learning Objective 	To recall and use multiplication and division facts

1) 7 x 2 = _____
2) 3 x 8 = _____
3) 4 x 6 = _____
4) 2 x 9 = _____
5) 6 x 4 = _____
6) 8 x 4 = _____
7) 7 x 5 = _____
8) 9 x 10 = _____
9) 6 x 6 = _____
21) 8 x 6 = _____
22) 7 x 9 = _____
23) 6 x 7 = _____
24) 8 x 8 = _____
25) 6 x 3 = _____
26) 9 x 6 = _____
27) 7 x 5 = _____
28) 8 x 9 = _____
29) 10 x 7 = _____

1) 6 x _____ = 18
2) 8 x _____ = 16
3) _____ x 7 = 7
4) _____ x 9 = 45
5) 7 x _____ = 21
6) _____ x 6 = 36
7) _____ x 8 = 40
8) 9 x _____ = 90
9) _____ x 8 = 32
10) _____ x 6 = 24
11) 7 x _____ = 63
12) _____ x 6 = 0
13) _____ x 8 = 80
14) 9 x _____ = 54
15) 6 x _____ = 42
16) _____ x 8 = 56
17) _____ x 9 = 81
18) 6 x _____ = 30
19) 8 x _____ = 48
20) _____ x 9 = 18
21) _____ x 7 = 49
22) 8 x _____ = 72
23) _____ x 6 = 48
24) 9 x _____ = 45
25) _____ x 7 = 63
26) 6 x _____ = 36
27) 8 x _____ = 64
28) _____ x 6 = 42
29) _____ x 9 = 72
30) 7 x _____ = 56
31) _____ x 8 = 48
32) 6 x _____ = 60
33) 9 x _____ = 45
34) _____ x 8 = 72
35) _____ x 7 = 28
36) 9 x _____ = 81
37) _____ x 6 = 6
38) _____ x 8 = 64
39) 7 x _____ = 49
40) _____ x 9 = 54

Steps to Success

Date			
Subject/s	**Maths**		
Learning Objective 	To draw shapes using angles		
		SA 	TA 
Success Criteria 	I can put my protractor at the end of the line		
	I can decide which scale to use		
	I know you only need to know 2 side lengths and one angle, or just one side length and two angles, to be able to draw a triangle		
Support	Independent Adult Support ( ) Group Work		

Pre-task:

In your book...

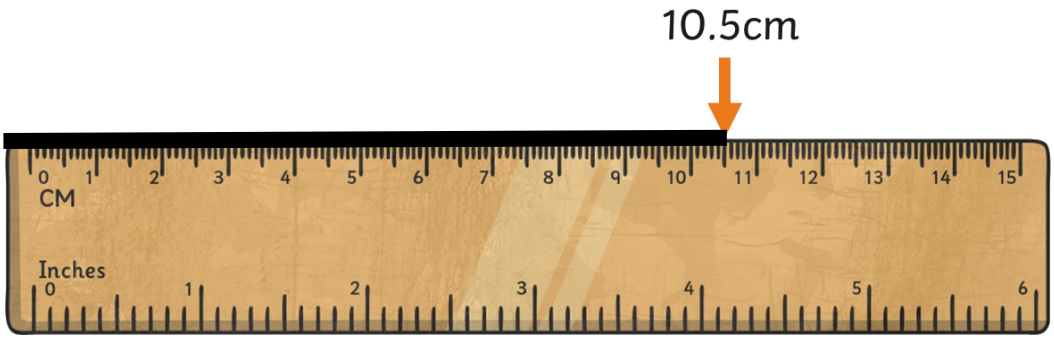
Draw a triangle with a base of 7.5cm and an angle of 35°. The line which makes this angle is 5.5cm.

Draw a triangle where the base is 5.6cm and two of the angles are 55° and 42°.

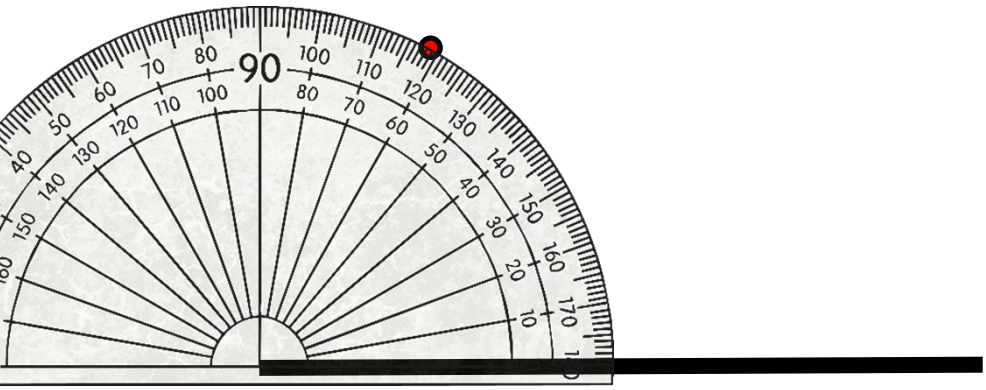
Teacher Led

"Draw a triangle with a base of 10.5cm, and two angles of 62 degrees and 85 degrees.

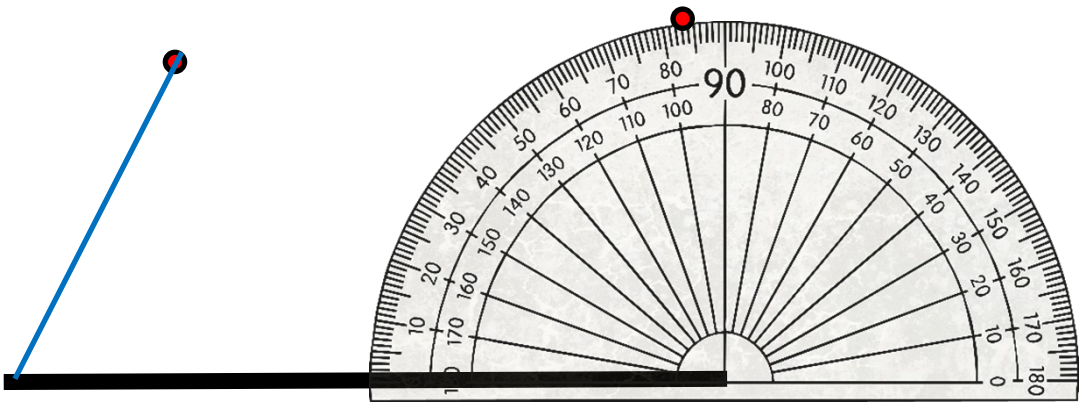
Draw the base line to the given amount



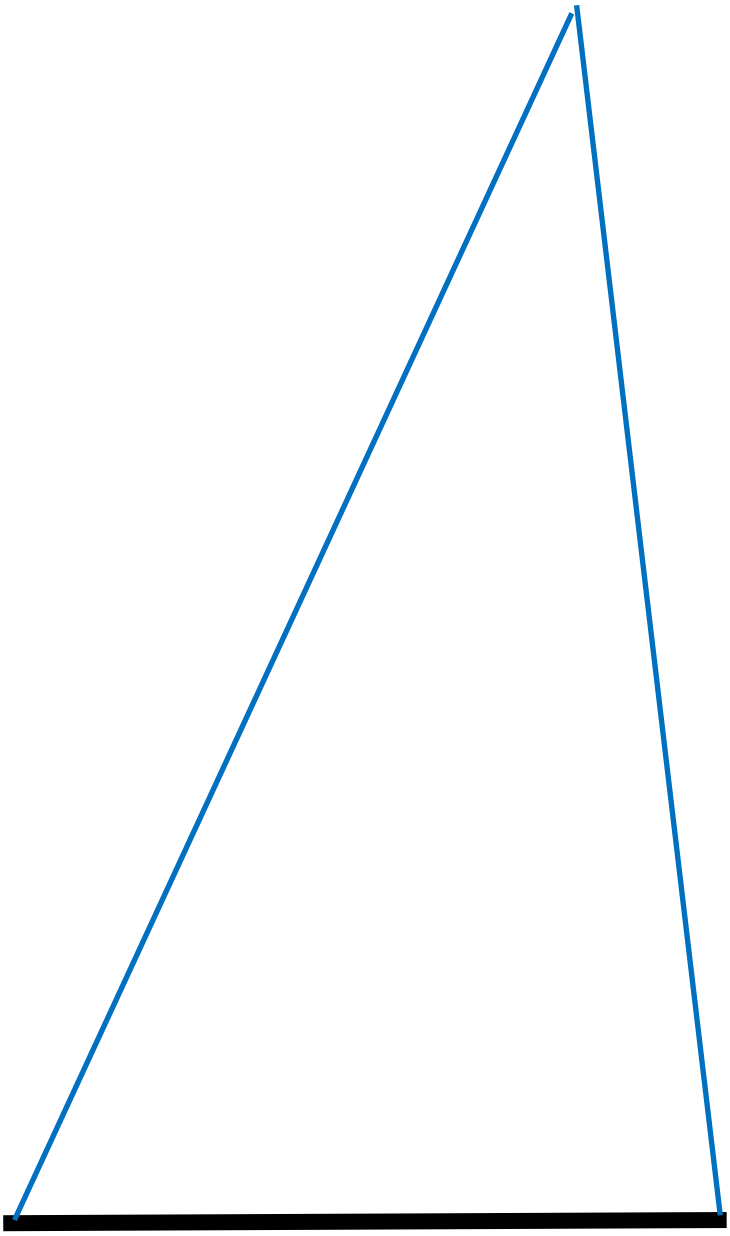
Put your protractor on one side and put at dot at the given degree (62). The join the dot to the line.



Then do the same the other side for the other given degree (85).

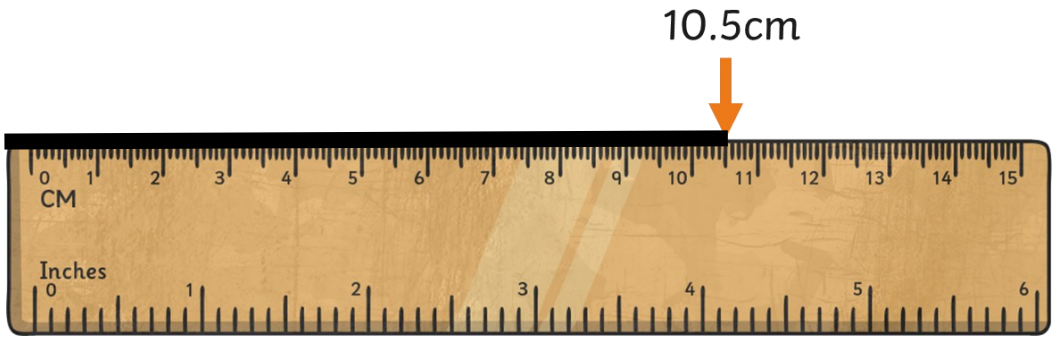


You will notice it doesn't look like a triangle yet! You need to use your ruler to extend the lines until they meet and then rub out any un-needed parts.

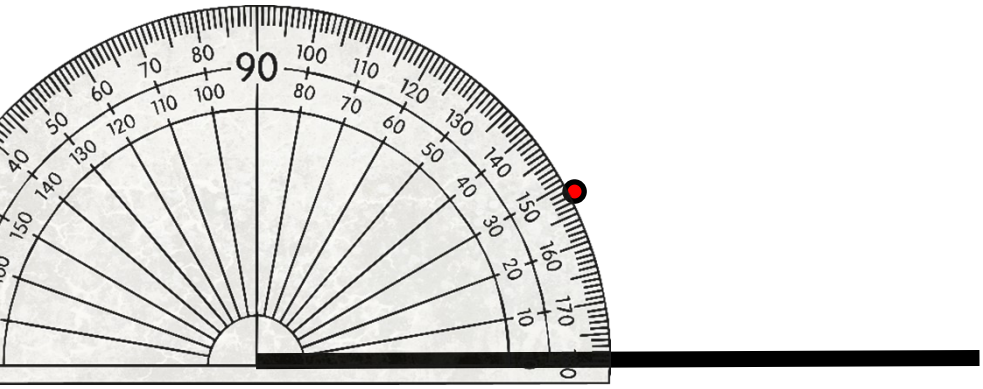


“Draw a triangle with a base of 10.5cm and an angle of 30 degrees at the length of 5cm.

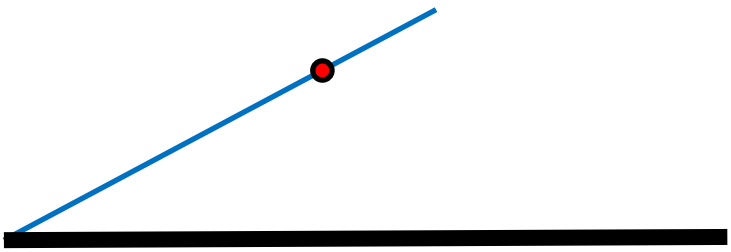
Draw the base line to the given amount



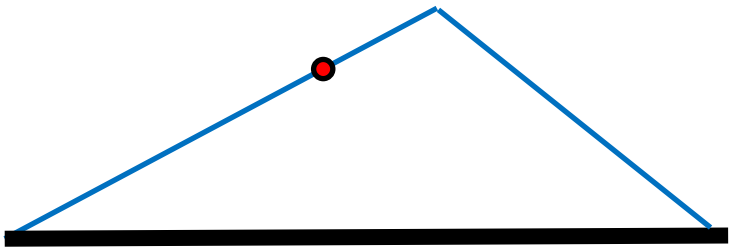
Put your protractor on one side and put at dot at the given degree (30).



This time when you join your dot to the corner, you are going to make sure your line is 5cm long, this may not go as far at the dot, or past it—it’s ok!



Then just join the two ends together.



Fluency

Draw the triangles

ΔPQR: Length PQ= 4cm,
Angle P= 120°,
Length PR= 6cm.

ΔXYZ: Length XY= 9cm,
Length XZ= 10cm,
Angle X= 30°.

ΔABC: Length AB= 8cm,
Length AC= 8cm,
Angle A = 37°.

ΔABC: Length AB=6cm,
Angle A = 20°,
Angle B = 140°.

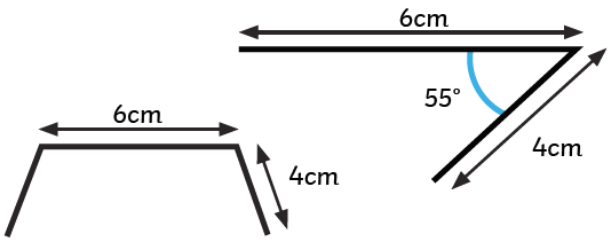
ΔXYZ: Length XY= 6cm,
Angle Y = 40°
Angle X = 50°

ΔRST: Length RS = 9cm
Angle S = 60°
Angle R = 60°

1. Draw a triangle with one side measuring 3cm and one angle measuring 40°.	Draw a square with sides measuring 3.5cm.
Draw a rectangle with sides measuring 2.5cm and 4.5cm.	4. Draw a triangle with angles measuring 50°, 30° and 100°.
5. Draw a rhombus with diagonally opposite angles measuring 110° and 70°.	6. Draw a regular pentagon with angles measuring 108°.

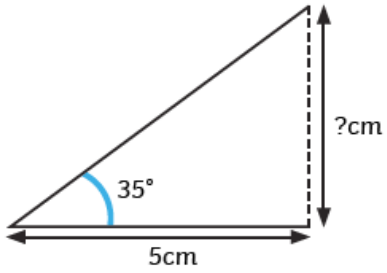
Problem solving and reasoning

1) a) Tick the drawing which can be completed to make a parallelogram? How do you know?



b) Complete the drawing of the parallelogram accurately and to scale and label the remaining angles.

2) Two friends are drawing this triangle in order to find the length of the missing side.



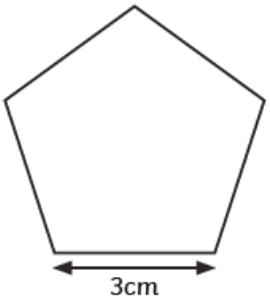
The height of the missing side is 3.5cm.

I disagree, I think the height will be 4.5cm.

Who is correct? _____

Draw the shape to scale, to check your answer. Label the sides and angles.

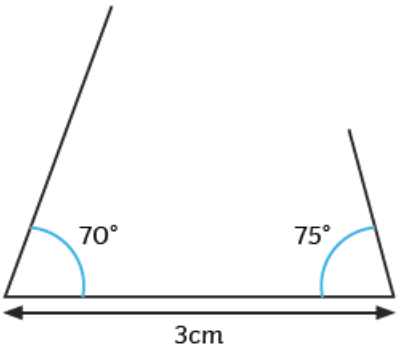
3) Max has written instructions for drawing a regular pentagon:



- Firstly, draw the 3cm line for the base.
- Next, draw the four remaining 3cm lines for the sides.
- Finally, mark and draw all of the 108° angles inside the shape.

Do you agree with the order of Max's instructions? Explain how you would change Max's instructions then draw Max's regular pentagon accurately and to scale.

1) a) Aron has started to draw an isosceles triangle.
What mistake has Aron made with his drawing?



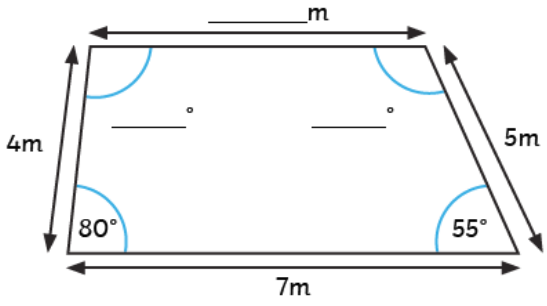
b) Help Aron by accurately drawing an isosceles triangle with the same length base.

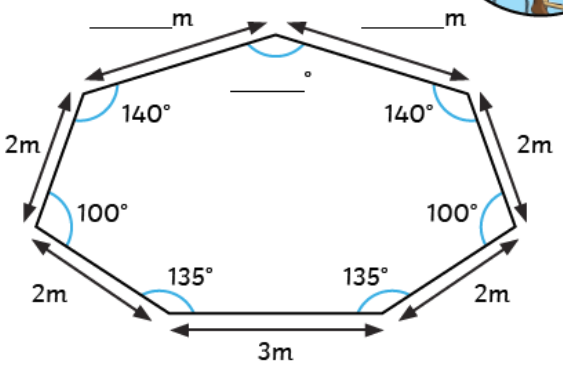
2) What shape am I?

I am a regular 2D shape.
I have equal side lengths of 2cm.
The sum of my interior angles is 720°.
I have equal angles of 120°.

Now draw this shape accurately and to scale.

3) a) Look at these scale models of new climbing frames for the playground.
Scale: 1m = 1cm
On plain paper, make accurate scale drawings of the models, in order to work out the missing measurements.





b) Now create your own scale model drawing of a piece of playground equipment. Make sure you label the angle sizes and lengths of each side.

Fluency Answers

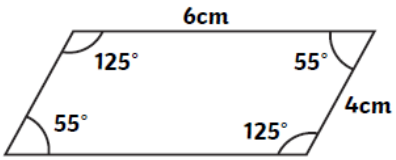
To be checked with a protractor and ruler

Problem solving and reasoning answers

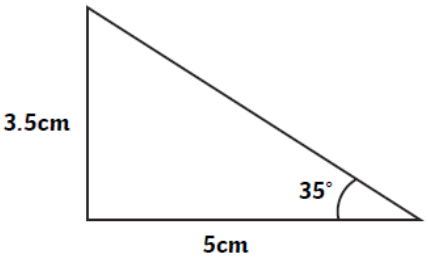
Diagrams are not drawn to scale.

1) a) The drawing on the right can be completed to make a parallelogram. The drawing on the left cannot be completed to make a parallelogram because the two sides are not parallel.

b)

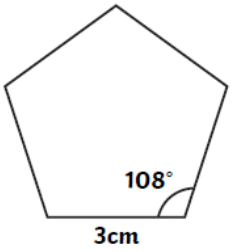


2) Olivia is correct. The length of the missing side is 3.5cm. Children should also have accurately drawn and labelled the right-angled triangle.



3) Max's instructions are not in the correct order. After drawing the base, he needs to measure and mark one angle then draw the next side and repeat. If he draws all of the sides first, he will not know if he has drawn the angles inside the shape accurately and although he may be able to draw a pentagon this way it will not be a regular pentagon.

Drawing of pentagon should have 5 equal angles of 108° (allow for slight inaccuracies in drawing) and all sides should measure 3cm.



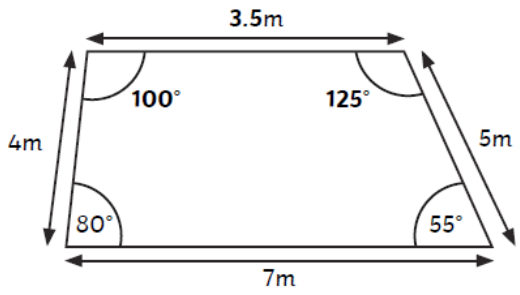
Diagrams are not drawn to scale.

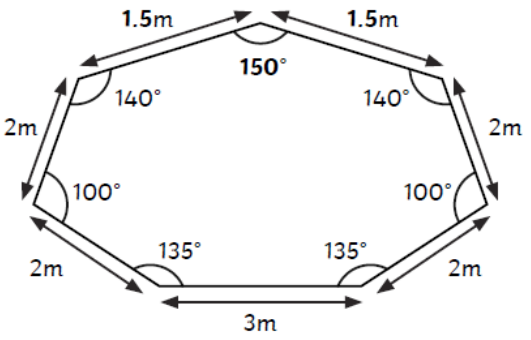
1) a) Aron's triangle should have two equal angles at the base. If Aron was to continue drawing, he would not create a scalene triangle as all the angles would be different.

b) Accept any drawing of an isosceles triangle with two equal sides, two equal angles at the base and a base length of 5cm.

2) I am a regular hexagon.
Accept drawing of a regular hexagon with equal sides of 2cm each and equal angles of approximately 120°.

3) a) Children should have drawn and labelled these shapes. Angles in a quadrilateral add to 360 degrees. Angles in a heptagon add to 900 degrees. Allow slight inaccuracies in drawing and approximations in angle size.





b) Answers will vary.

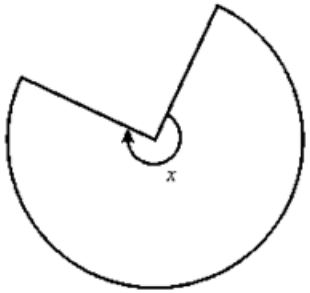
Date	
Subject/s	Maths
Learning Objective 	To recall and use multiplication and division facts

3 x 4 =	7 x 8 =	9 ÷ 3 =	36 ÷ 12 =
21 ÷ 7 =	8 x 6 =	12 x 4 =	10 x 8 =
4 x 8 =	3 x 9 =	4 x 7 =	3 x 11 =
40 ÷ 8 =	15 ÷ 3 =	27 ÷ 9 =	20 ÷ 4 =
4 x 11 =	48 ÷ 6 =	8 ÷ 4 =	6 x 8 =
5 x 8 =	11 x 3 =	5 x 8 =	80 ÷ 10 =
24 ÷ 4 =	88 ÷ 11 =	24 ÷ 3 =	4 x 1 =
72 ÷ 8 =	8 x 4 =	9 x 4 =	8 x 5 =
10 x 3 =	16 ÷ 4 =	8 x 11 =	6 x 4 =
5 x 4 =	32 ÷ 8 =	6 ÷ 3 =	3 ÷ 3 =
12 ÷ 3 =	3 x 6 =	48 ÷ 12 =	44 ÷ 11 =
4 x 9 =	8 ÷ 8 =	3 x 4 =	7 x 3 =
11 x 8 =	4 x 3 =	0 x 8 =	12 x 8 =
3 x 12 =	48 ÷ 8 =	18 ÷ 3 =	28 ÷ 4 =
24 ÷ 8 =	30 ÷ 10 =	3 x 3 =	56 ÷ 7 =
27 ÷ 3 =	8 x 9 =	64 ÷ 8 =	4 x 12 =
7 x 4 =	10 x 4 =	36 ÷ 4 =	5 x 3 =
36 ÷ 9 =	16 ÷ 8 =	8 x 8 =	56 ÷ 7 =
56 ÷ 8 =	8 x 3 =	21 ÷ 3 =	4 x 6 =
3 x 0 =	72 ÷ 9 =	4 x 12 =	32 ÷ 4 =
12 ÷ 4 =	3 x 8 =	96 ÷ 12 =	12 x 3 =
33 ÷ 3 =	4 x 4 =	24 ÷ 8 =	7 x 8 =
6 x 3 =	9 x 8 =	2 x 3 =	9 x 3 =
40 ÷ 4 =	4 ÷ 4 =	11 x 4 =	21 ÷ 3 =
28 ÷ 7 =	3 x 7 =	32 ÷ 8 =	8 x 12 =

Steps to Success

Date	Subject/s	Learning Objective
	Maths	To apply my knowledge of angles.

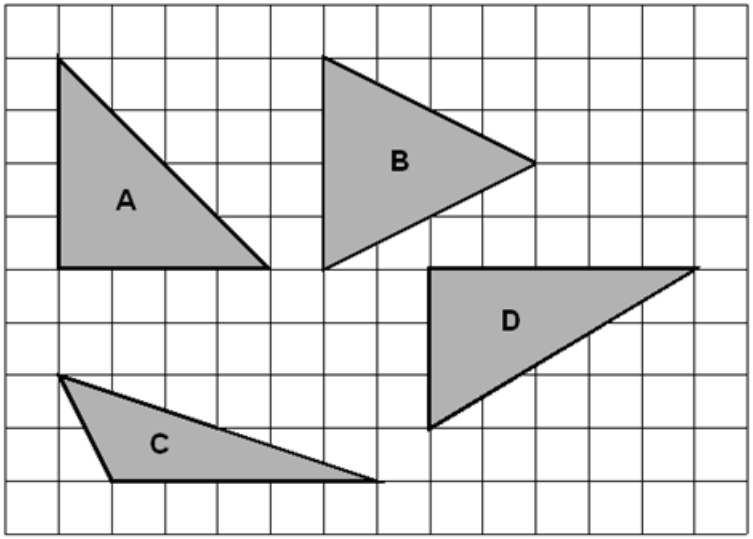
Q1. This shape is **three-quarters of a circle**.



How many degrees is **angle x**?

°

Q2. Here are four triangles drawn on a square grid.



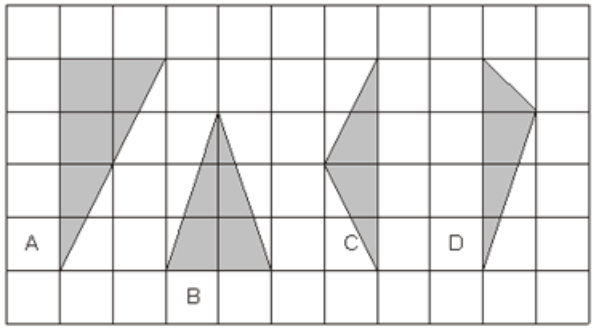
Write the letter for each triangle in the correct region of the sorting diagram.

One has been done for you.

	has a **right** angle	has an **obtuse** angle	has 3 **acute** angles
is isosceles	**A**		
is **not** isosceles			

2 marks

Q4. Here are four triangles on a square grid.



Write the letters of the **two isosceles** triangles.

..... and .....

1 mark

Write the letter of each triangle that has a **right angle**.

.....

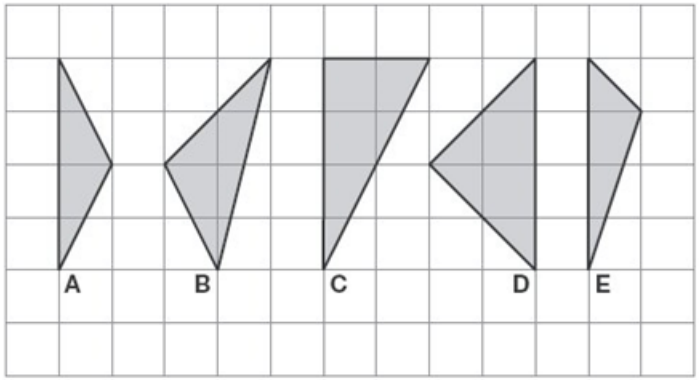
1 mark

Write the letter of each triangle that has **two equal sides**.

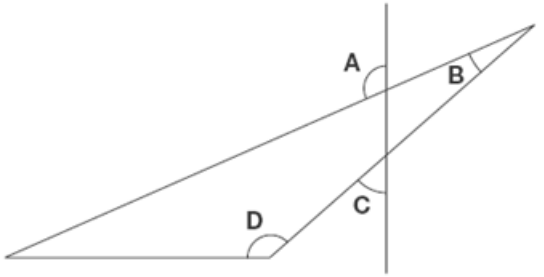
.....

1 mark

Q5. Here are five shaded triangles on a square grid.



Q6. This diagram has four angles marked **A**, B, C and **D**.

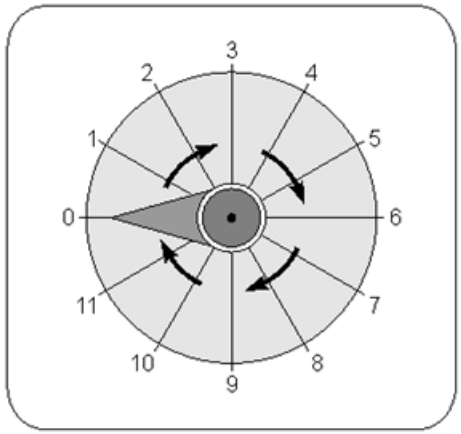


Write the letters of the angles that are **obtuse** angles.

.....

1 mark

Q5. Here is a dial.



The pointer on this dial turns in a **clockwise** direction.
The pointer is at **0**.

Which **number** does it point to after a turn of **270°**?

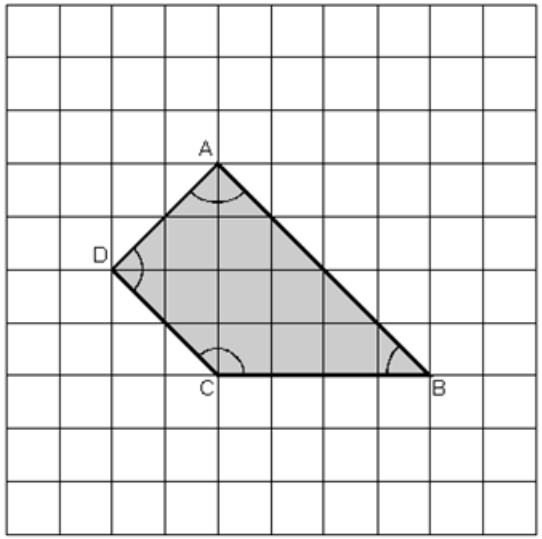
1 mark

The pointer moves from **10** to **11**.

How many **degrees** does it turn through?

1 mark

Q7. Here is a shape on a square grid.



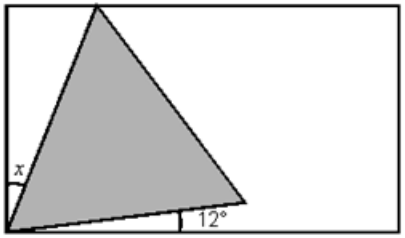
For each sentence, put a tick (✓) if it is true.

Put a cross (✗) if it is not true.

Angle **C** is an **obtuse** angle.	☐
Angle **D** is an **acute** angle.	☐
Line **AD** is **parallel** to line **BC**.	☐
Line **AB** is **perpendicular** to line **AD**.	☐

2 marks

Q8. Here is an **equilateral triangle** inside a **rectangle**.



Not to scale

Calculate the value of angle ***X***.

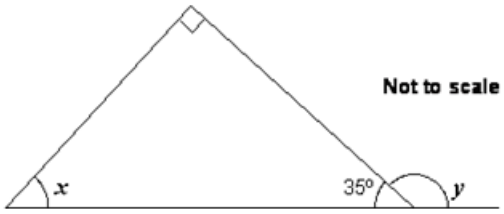
Do **not** use a protractor (angle measurer).

Show your **working**. You may get a mark

°

2 marks

Q9. Look at this diagram.



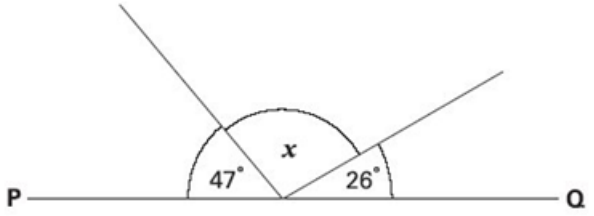
Not to scale

Calculate the size of angle x and angle y.

Do **not** use a protractor (angle measurer).

Q10. **PQ** is a straight line.

Not drawn accurately



Calculate the size of angle x.

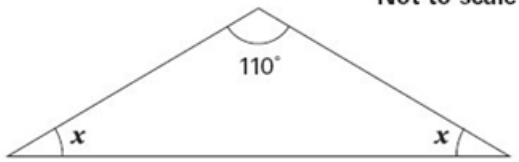
Do **not** use a protractor (angle measurer).

°

1 mark

Q12. Here is an isosceles triangle.

Not to scale



Calculate the size of angle x.

Do **not** use a protractor (angle measurer).

x =

1 mark

Q15. Jamie draws a triangle.

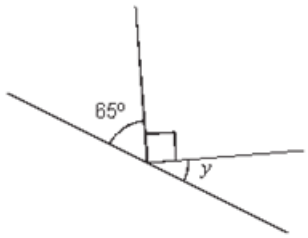
He says,

'Two of the three angles in my triangle are obtuse'.

Explain why Jamie **cannot** be correct.

1 mark

Q17.



Not to scale

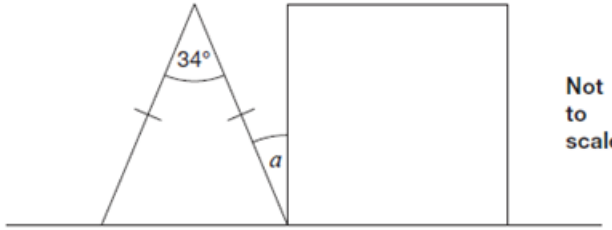
Calculate the size of angle y in this diagram.

Do **not** use a protractor (angle measurer).

$y =$ °

1 mark

Q21. The diagram shows an isosceles triangle and a square on a straight line.



Not to scale

Calculate angle a.

Show your method

°

2 marks

M1. 270°

M2. Award **TWO** marks for three letters in the correct regions of the sorting diagram, as shown:

A		**B**
D	**C**	

Award **ONE** mark for two letters in the correct regions of the sorting diagram.

Do not *accept letters that are written in more than one region.*

Accept alternative indications such as lines drawn from the shapes to the appropriate regions of the sorting diagram.

Up to

M4. B **AND** C

Answers may be given in either order.

M5. (a) C **AND** D

Letters may be given in either order.

(b) A **AND** D

Letters may be given in either order.

M6. A **AND** D

Letters may be given in either order.

M5. (a) 9

1

(b) 30

1

[2]

M7. Award **TWO** marks for the boxes ticked and crossed as shown:

☑

☒

☒

☑

If the answer is incorrect, award **ONE** mark for any three boxes ticked or crossed correctly **OR** two boxes correctly ticked and the other two boxes left blank.

Up to 2

[2]

M8. Award **TWO** marks for the correct answer of 18°

Calculation need not be performed for the award of the mark.

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, eg 90 – 60 – 12

Up to 2

[2]

M9. (a) x = **55°**

1

(b) y = **145°**

*If the answers for (a) and (b) are transposed, but otherwise correct, award **ONE** mark only, in the (b) box.*

1

[2]

M10. 107

[1]

Answers

M12. $x =$ 35°

[1]

M15. An explanation (or diagram) which recognises that the sum of two obtuse angles would be greater than 180 degrees, eg:

- 'An obtuse angle is greater than 90 degrees and the angles of a triangle add up to 180 degrees'
- 'Two obtuse angles add up to more than 180'
- '180 degrees is less than two obtuse angles'
- 'It must have at least two acute angles'
- 'The shape would need more than 3 sides to join up'
- 

***Do not** accept answers that refer only to the properties of obtuse angles **OR** to the angles of a triangle, eg:*

- *'The angles of a triangle add up to 180 degrees'*
- *'Obtuse angles are greater than 90 degrees'.*

***Do not** accept vague or incomplete explanations, eg:*

- *'A triangle cannot have two obtuse angles'*
- *'Obtuse angles would be too big'*
- *'You can only have acute angles'.*

U1

[1]

M17. 25

[1]

M21.17

! Answer written on diagram
Accept providing there is no ambiguity

2

or

73° seen (*one of the other angles in the isosceles triangle*)

OR

Shows or implies a complete correct method, eg:

- 180 − 34 = 144 *(error)*

  144 ÷ 2 = 72

  90 – 72 = 28 *(error)*

1

[2]

Date	
Subject/s	Maths
Learning Objective 	To recall and use multiplication and division facts

1	9 X 7		30	6 x 9		59	9 X 4	
2	8 x 4		31	12 x 3		60	7 x 6	
3	7 x 10		32	3 x 8		61	4 x 8	
4	9 x 9		33	8 X 8		62	12 X 2	
5	6 x 2		34	6 x 8		63	3 x 6	
6	4 x 7		35	11 x 7		64	4 x 10	
7	9 X 2		36	10 x 1		65	9 x 11	
8	12 x 12		37	10 x 5		66	3 x 12	
9	5 X 9		38	3 x 5		67	3 x 10	
10	7 X 7		39	12 x 11		68	4 X 4	
11	11 x 6		40	6 x 6		69	4 x 9	
12	5 x 11		41	2 x 9		70	4 x 11	
13	4 x 6		42	12 x 7		71	6 x 5	
14	9 x 5		43	11 x 8		72	7 x 2	
15	8 X 12		44	2 x 6		73	5 x 12	
16	10 x 10		45	4 x 5		74	2 x 10	
17	7 x 3		46	4 x 9		75	4 x 12	
18	5 x 8		47	8 x 2		76	7 x 8	
19	3 x 3		48	7 x 9		77	6 x 10	
20	10 x 11		49	12 x 8		78	12 x 6	
21	11 x 2		50	9 X 4		79	7 x 12	
22	2 x 7		51	5 X 5		80	2 X 2	
23	6 x 12		52	10 x 12		81	11 x 0	
24	5 x 7		53	8 x 11		82	2 x 12	
25	10 x 6		54	4 x 3		83	2 X 4	
26	9 x 12		55	2 x 5		84	8 x 5	
27	5 x 4		56	5 x 10		85	7 x 11	
28	11 x 11		57	9 x 3		86	9 x 6	
29	7 x 4		58	8 x 10		87	10 x 11	

Steps to Success

Date			
Subject/s	**Maths**		
Learning Objective 	I can identify 3D shapes		
		SA 	TA 
Success Criteria 	I can name and describe: cube, cuboid, triangular based pyramid,		
	I can visualise the vertices, edges and vertices of the shapes		
	I can begin to look at patterns between prisms		
Support	Independent Adult Support ( ) Group Work		

Pre-task:

Name and describe the properties of this 3D shape

Teacher Led

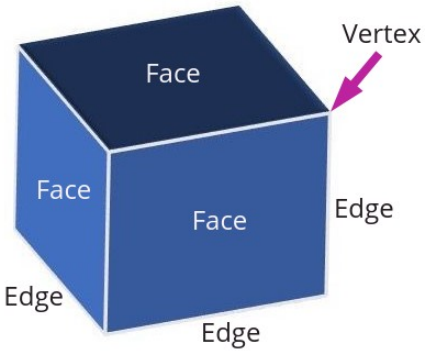
https://corbettmaths.com/2018/04/20/3d-shapes-videos/

What 3D shapes do you know?

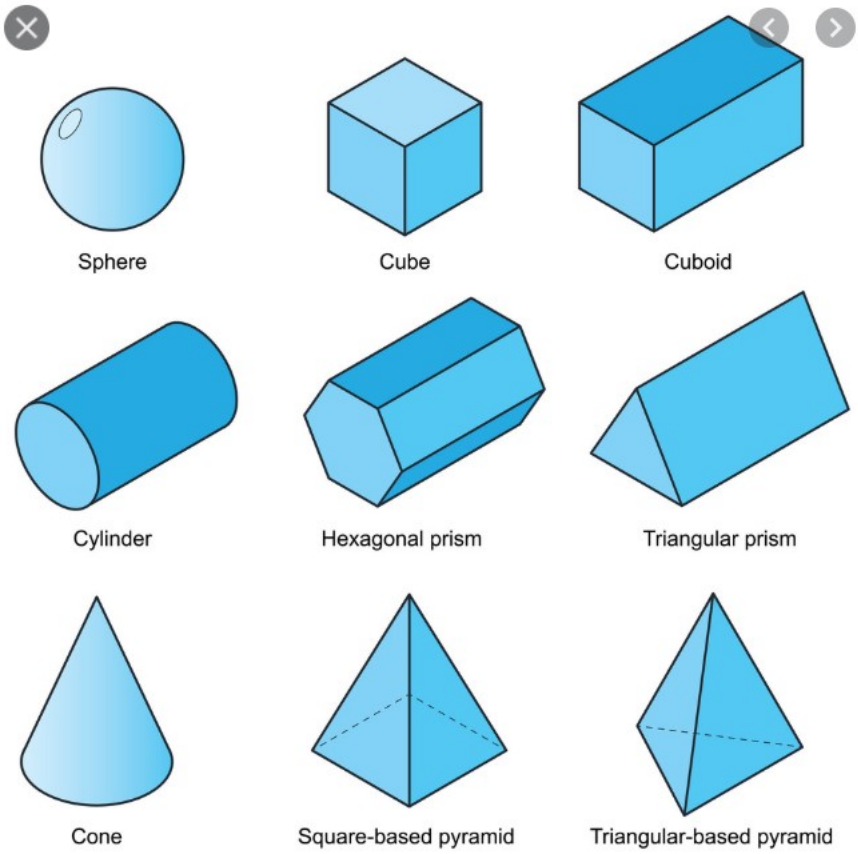
Can you find any around your house?

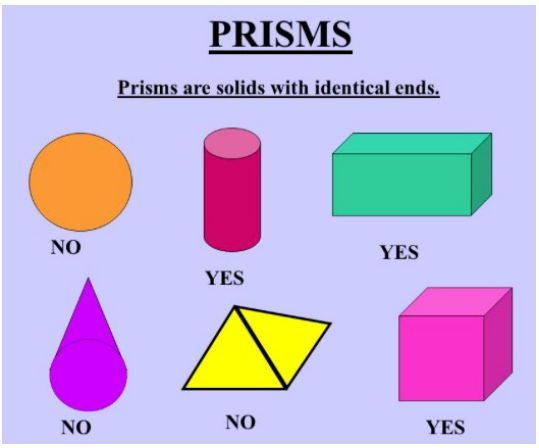
3D shapes have different properties: edges, vertices and faces.

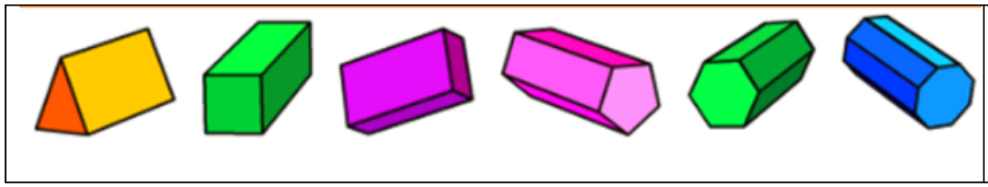
Their faces are the shape of 2D shapes.

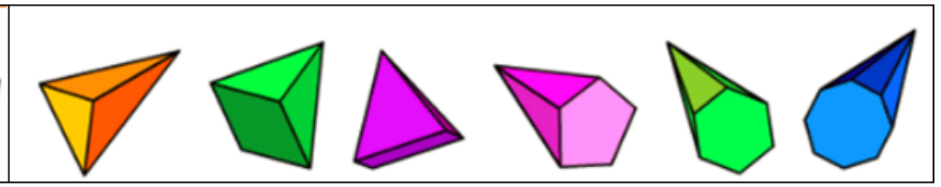


These are some 3D shapes









Shape	Shape of faces	Number of faces	No. of vertices	No. of edges		Shape	Shape of faces	Number of faces	No. of vertices	No. of edges

Fluency

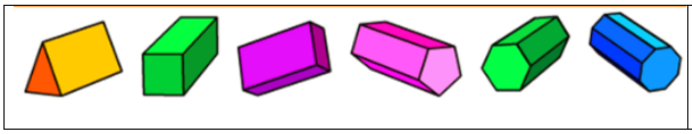
Word bank: triangular, square, octagonal, rectangular, pentagonal, hexagonal, prism, pyramid, cuboid

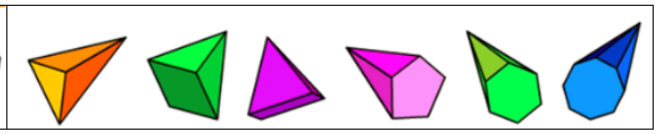
Problem Solving and Reasoning

Below is a list of prisms. Can you come up with a rule that will allow you to work out the number of faces, edges and vertices of the shape, without counting them?

Type of prism	Number of sides of each end polygon	Number of faces	Number of edges	Number of vertices
Triangular prism				
Cube				
Rectangular prism				
Pentagonal prism				
Hexagonal prism				
Heptagonal prism				
Octagonal prism				
Nonagonal prism				
Decagonal prism				

Answers





Shape	Shape of faces	Number of faces	No. of vertices	No. of edges
Triangular Prism	Triangle Rectangle	5	6	9
Cuboid/ Rectangular prism	Square/Rectangle Rectangle	6	8	12
Pentagonal Prism	Pentagon Rectangle	7	10	15
Hexagonal Prism	Hexagon Rectangle	8	12	18
Octagonal Prism	Octagon Rectangle	10	16	24

Shape	Shape of faces	Number of faces	No. of vertices	No. of edges
Triangular Based Pyramid	Triangle	4	4	6
Square based pyramid	Triangle Square	5	5	8
Pentagonal based pyramid	Pentagon Triangle	6	6	10
Hexagonal based pyramid	Hexagon Triangle	7	7	12
Octagonal based pyramid	Octagon Triangle	9	9	16

Problem Solving and Reasoning

Type of prism	Number of sides of each end polygon	Number of faces	Number of edges	Number of vertices
Triangular prism	3	5	9	6
Cube	4	6	12	8
Rectangular prism	4	6	12	8
Pentagonal prism	5	7	15	10
Hexagonal prism	6	8	18	12
Heptagonal prism	7	9	21	14
Octagonal prism	8	10	24	16
Nonagonal prism	9	11	27	18
Decagonal prism	10	12	30	20

If we have the end polygon, it will be easy to calculate the number of faces, vertices and edges of each 3D prism.

To calculate the number of faces, we can say that it is the end polygon + 2

To calculate the number of edges, we can say it is the end polygon x 3

To calculate the number of vertices, we can say that it is the end polygon x 2

Date	
Subject/s	Maths
Learning Objective 	To recall and use multiplication and division facts

2 x 2 =	3 x 3 =	4 x 4 =	11 x 10 =
3 x 5 =	6 x 8 =	7 x 5 =	10 x 2 =
4 x 6 =	12 x 5 =	8 x 12 =	3 x 12 =
7 x 4 =	8 x 6 =	10 x 11 =	4 x 9 =
10 x 10 =	10 x 12 =	4 x 2 =	5 x 7 =
9 x 3 =	11 x 2 =	10 x 3 =	9 x 8 =
7 x 2 =	3 x 9 =	6 x 8 =	10 x 7 =
11 x 3 =	4 x 11 =	12 x 10 =	7 x 8 =
10 x 5 =	2 x 5 =	2 x 11 =	4 x 3 =
2 x 4 =	6 x 10 =	8 x 3 =	12 x 4 =
5 x 6 =	10 x 9 =	3 x 4 =	5 x 8 =
7 x 10 =	2 x 12 =	4 x 5 =	8 x 8 =
9 x 2 =	5 x 3 =	7 x 8 =	12 x 2 =
3 x 11 =	9 x 4 =	8 x 10 =	5 x 4 =
10 x 4 =	5 x 5 =	2 x 8 =	9 x 5 =
8 x 5 =	8 x 8 =	8 x 0 =	8 x 11 =
9 x 8 =	9 x 10 =	4 x 12 =	2 x 10 =
4 x 10 =	5 x 2 =	12 x 8 =	4 x 7 =
3 x 2 =	6 x 3 =	3 x 6 =	11 x 5 =
7 x 3 =	6 x 4 =	5 x 10 =	2 x 3 =
4 x 8 =	5 x 11 =	8 x 2 =	8 x 9 =
5 x 9 =	2 x 6 =	3 x 7 =	8 x 4 =
12 x 8 =	3 x 10 =	11 x 4 =	11 x 8 =
2 x 9 =	2 x 7 =	5 x 12 =	12 x 3 =
10 x 8 =	3 x 8 =	0 x 4 =	8 x 7 =

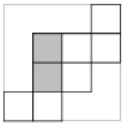
Steps to Success

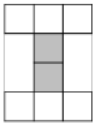
Date			
Subject/s	**Maths**		
Learning Objective 	To identify and draw nets for 3D shapes		
		SA 	TA 
Success Criteria 	I can use my knowledge of properties of 3D shapes I can visualise how the net will fold I know there is more than 1 net for the same shape		
Support	Independent Adult Support ( ) Group Work		

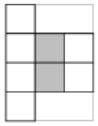
Pre-task:

Here is an open box.

Which of the nets will fold together to make the box?
The grey squares show the base.

A 

B 

C 

Using the squares in your book, draw a net for a triangular prism

Teacher Led

https://corbettmaths.com/2013/12/23/nets-2/

To work out what the net should be of a shape I need to know the following:

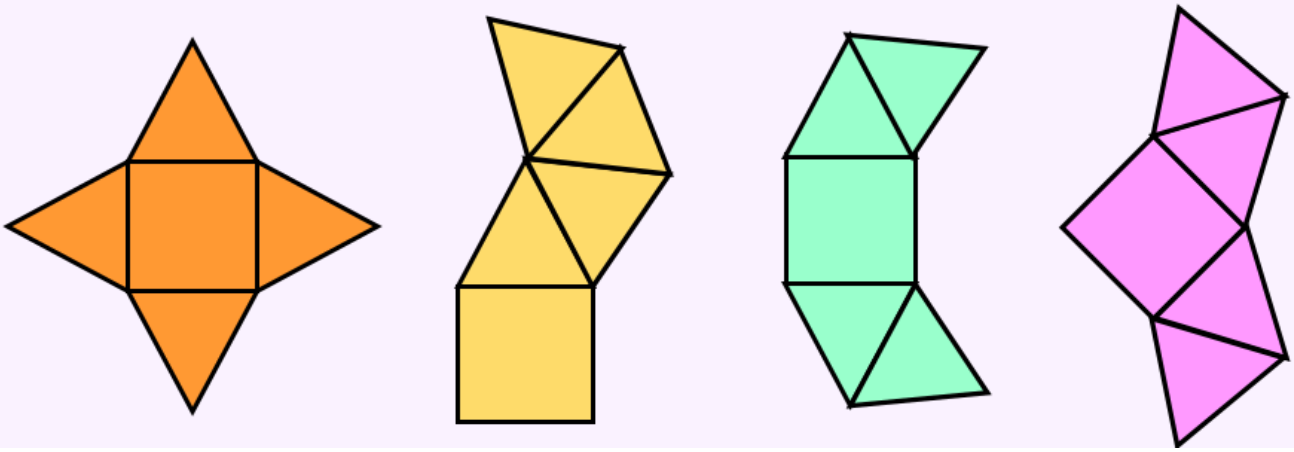
How many faces does the shape have?

What are the different shapes of the faces?

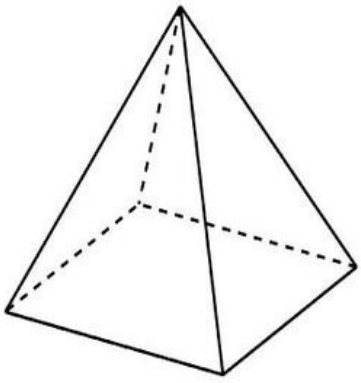
Which faces have edges that join them together?

I need to visualise the shape in my head and imagine it unfolding and then the net folding back up again.

Which nets will make a square-based pyramid?



I know a square based pyramid looks like this:



It has four triangular faces that all share an edge with the square and share their other two edges with another triangle. They all join together at the top to make a vertex.

It has one square face at the bottom.

I know the orange shape will work as all the triangular faces share edges and they all join with a point at the top.

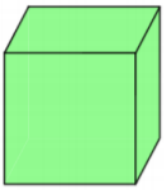
I know the yellow one will work as each triangle shares an edge with the square and the net will wrap around the square as you fold it back together.

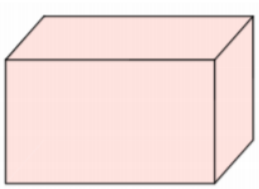
I know the green one won't work as the two triangles will be folded to share the same edge with the square and there will be no triangle on the left hand edge of the square.

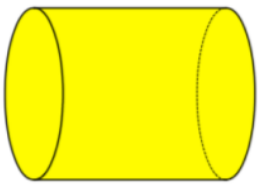
I know the purple one will work as the two triangles will wrap around on to the two edges of the square that are left.

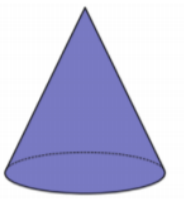
Fluency

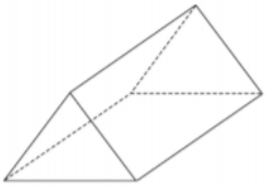
Question 1: Draw the nets for these 3D shapes

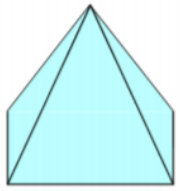
(a) 

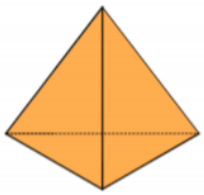
(b) 

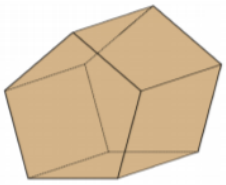
(c) 

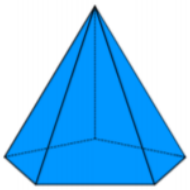
(d) 

(e) 

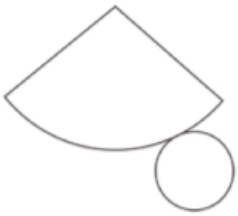
(f) 

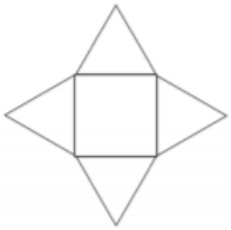
(g) 

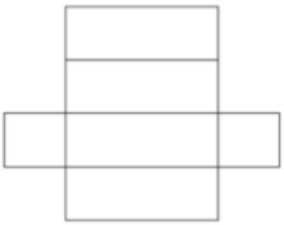
(h) 

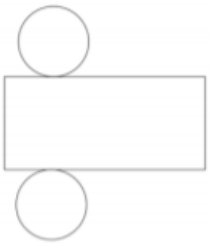
(i) 

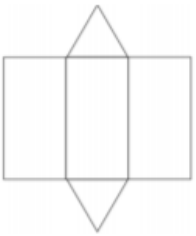
Question 2: Below are nets for various 3D shapes. Name the 3D shapes.

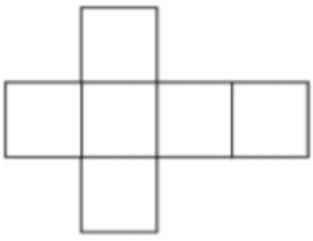
(a) 

(b) 

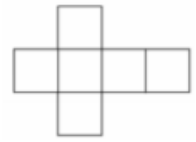
(c) 

(d) 

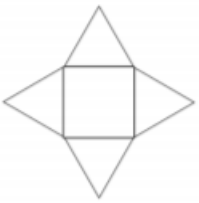
(e) 

(f) 

Question 1: Shown below is a net for a cube. Draw all the other possible nets for a cube.

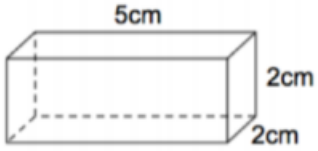


Question 2: Shown below is a net for a square-based pyramid. Draw all other possible nets for a square-based pyramid.



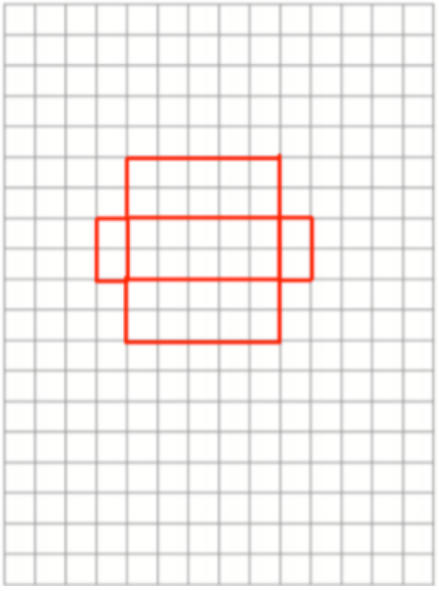
Question 3: Can you spot any mistakes below?

Shown below is a cuboid.



Draw a net for the cuboid.

Each square represents 1cm²

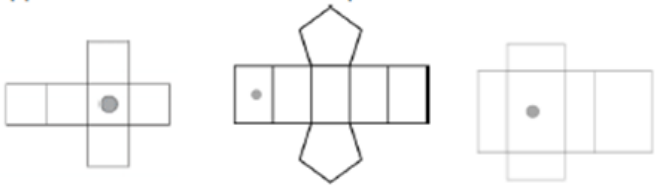


Corbettmaths

Problem Solving and Reasoning

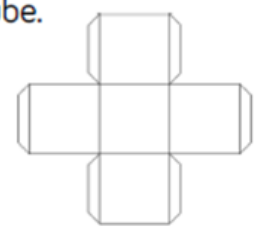
Use it!

Draw another dot on the nets so they have a dot on the opposite face when the 3D shape is constructed.



Explain it!

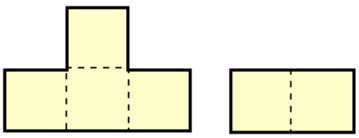
Sally thinks that this net will fold to create a cube.



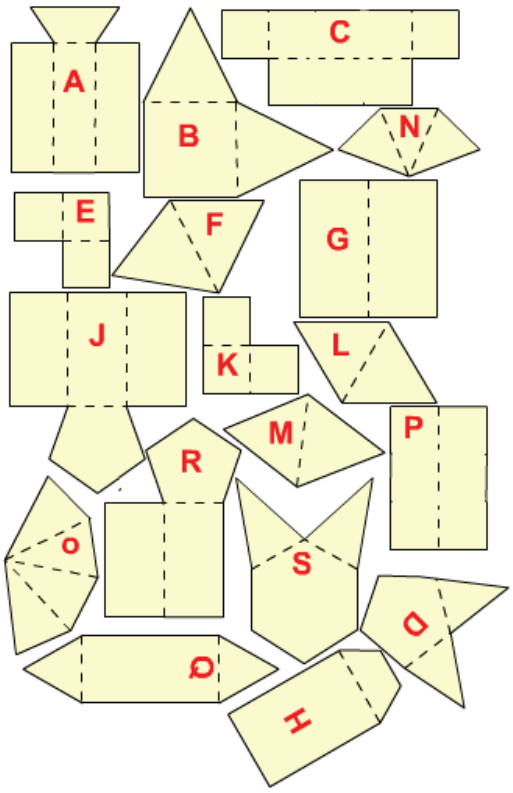
Do you agree with Sally?
Explain your answer.

Further Challenge

The net of a cube has been cut into two. It could be put together in several ways so that it could be folded into a cube.



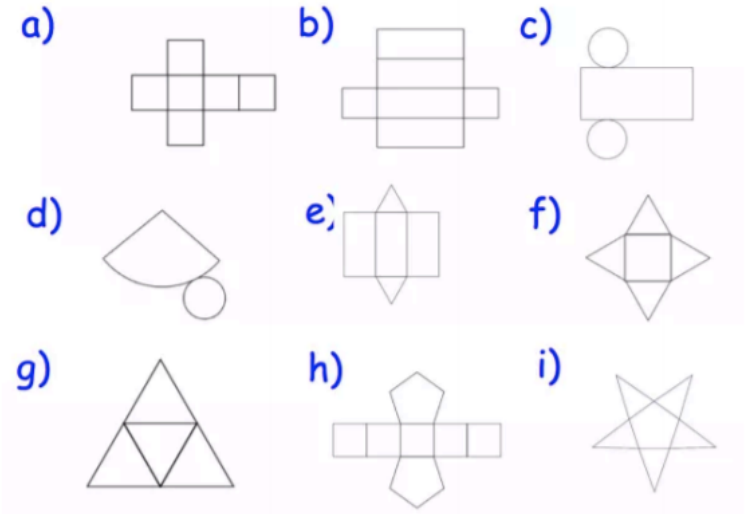
Here are the nets of 9 solid shapes. Each one of these has been cut into 2pieces, like the net of the cube.



Can you see which pieces go together? Draw them clearly together in your book and label each part with the correct letter.

Answers

Question 1



Question 2

a) Cone

b) Square based pyramid

c) Cuboid

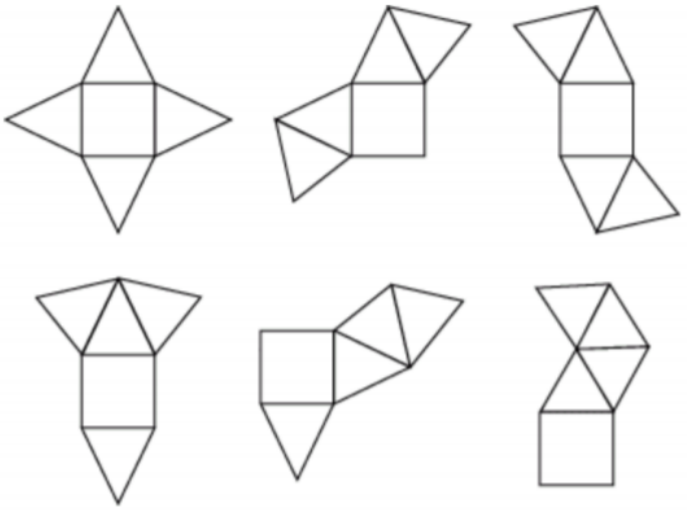
d) Cylinder

e) Triangular Prism

Problem solving and reasoning answers

Answers
Dot on the left hand side square Dot on the 4th rectange Dot on the other larger rectange
Sally is incorrect because a cube has 6 faces, this would only have 5

Question 2:



Question 3:

Mistake 1: There is no lid for the cuboid.

Mistake 2: There should be 2×2 squares on the right/left sides

Question 1: