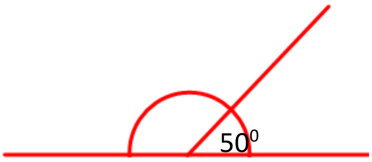
<u>Thursday 16th April - Mild - Angles on a straight line</u>

Find the missing angle in each of these diagrams

1)



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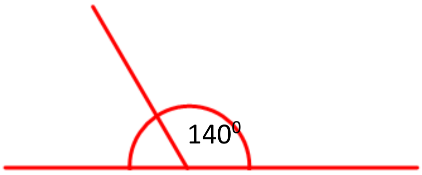
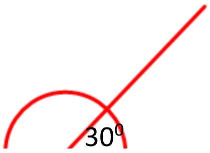


3)



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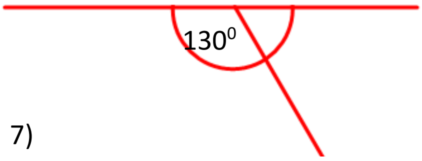
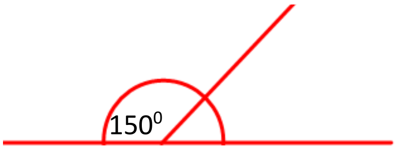
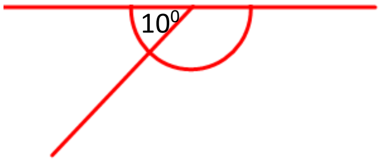


5)



6)



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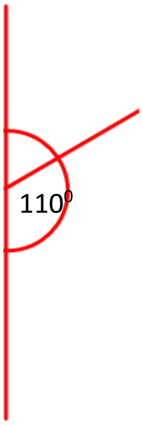
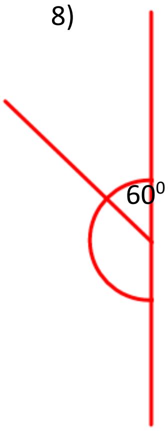


8)



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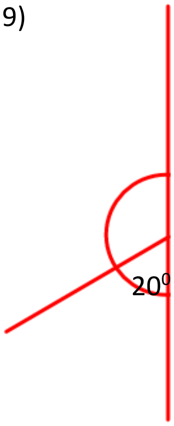

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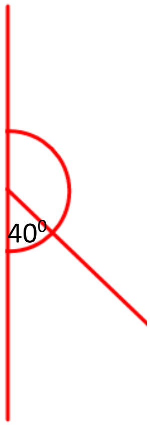

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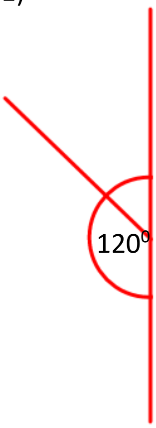

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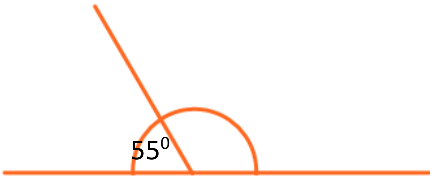

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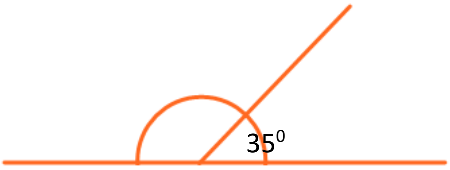

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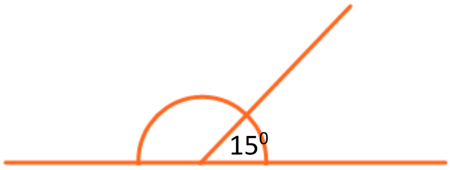

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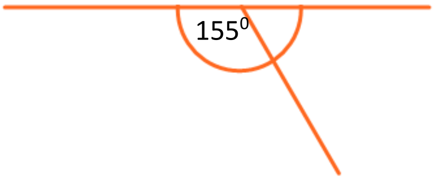

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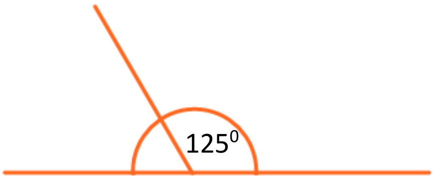

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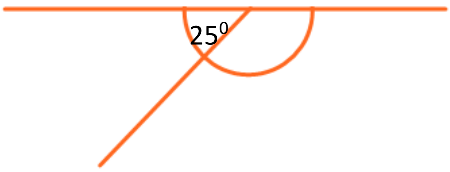
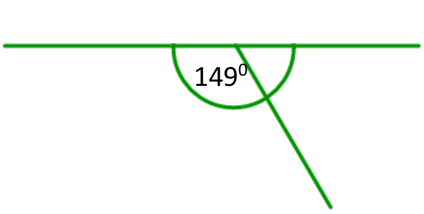


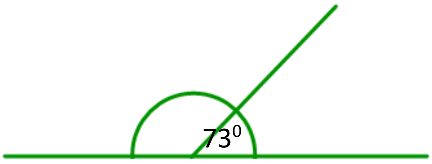
<u>Thursday 16th April - Spicy - Angles on a straight line</u>

Find the missing angle in each of these diagrams

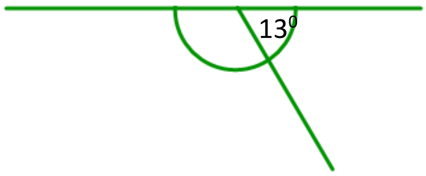
1)



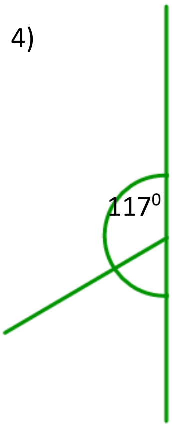
2)



3)



4)



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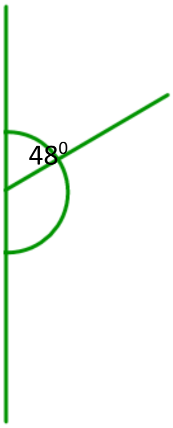

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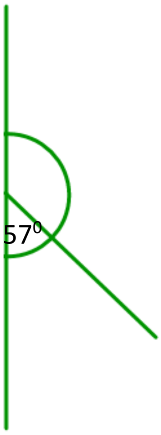

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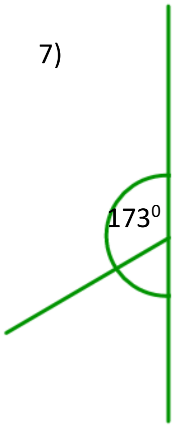

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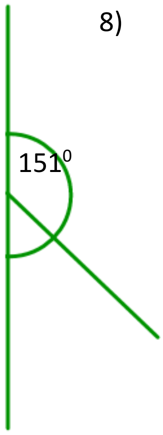
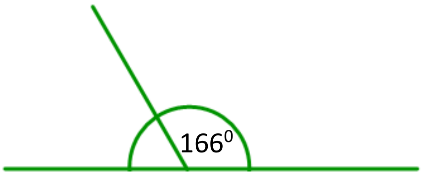


9)



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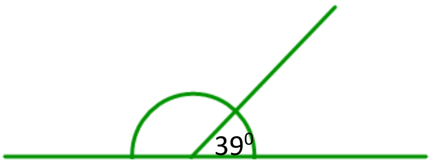
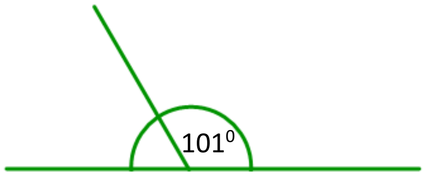


11)



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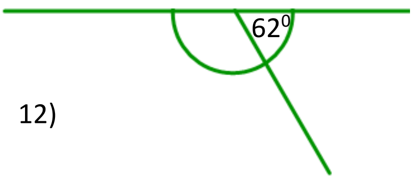

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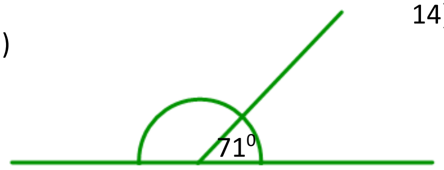

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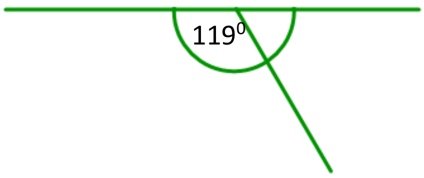
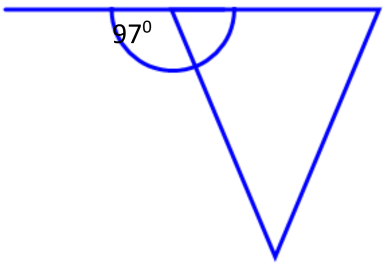


Thursday 16th April - HOT Angles on a straight line and triangle

Find EACH of the missing angles. Use what you know of angles in a triangle AND angles on a straight line to calculate ALL missing angles. The diagrams may not be to scale.

1)



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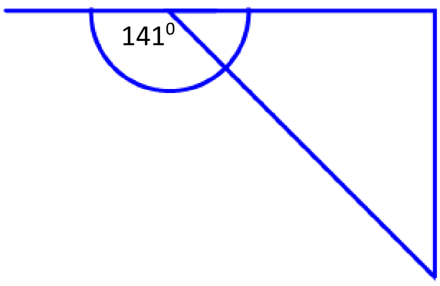

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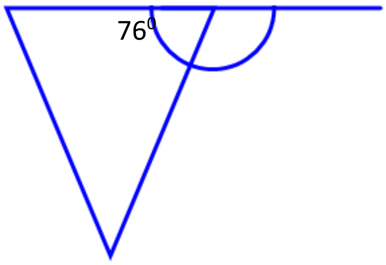
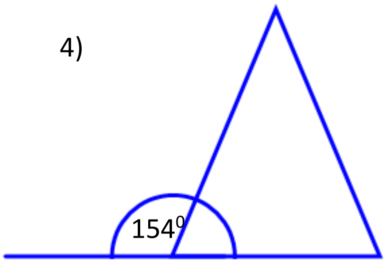
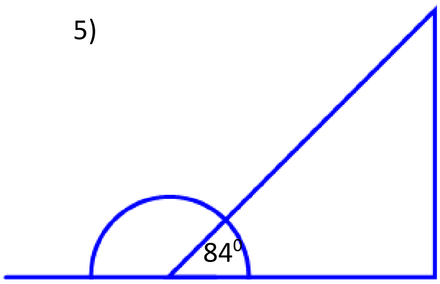


4)



5)



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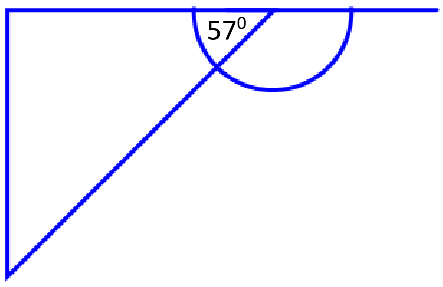
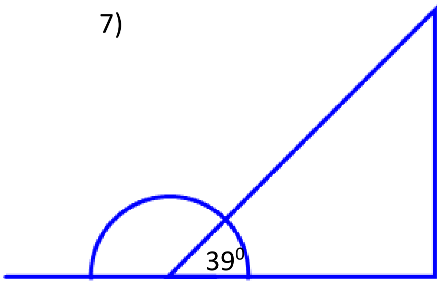
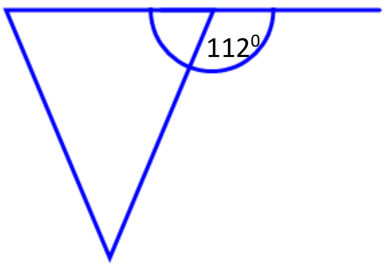


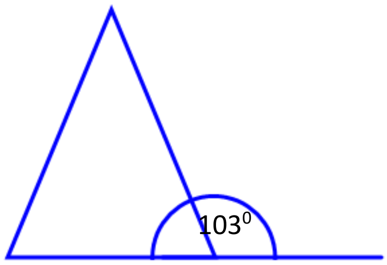
7)



8)



9)

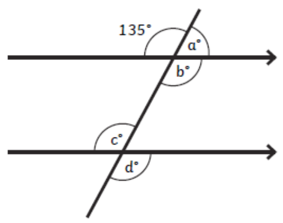


Thursday 16th April - Extra Hot:

Calculate the missing angles using your knowledge of straight line and vertically opposite angles:

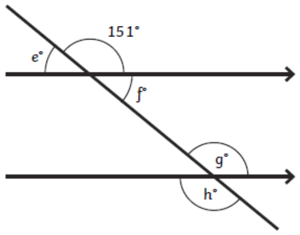
‘Vertically opposite angles’ means that the angles opposite each other when two lines cross are always equal.

1.



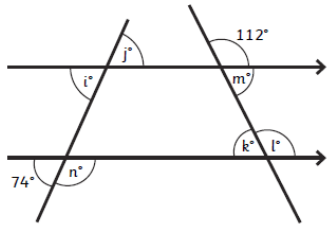
a = _____ °
b = _____ °
c = _____ °
d = _____ °

2.



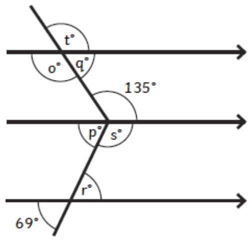
e = _____ °
f = _____ °
g = _____ °
h = _____ °

3.



i = _____ °
j = _____ °
k = _____ °
l = _____ °
m= _____ °
n = _____ °

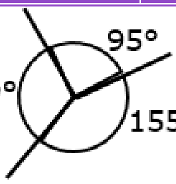
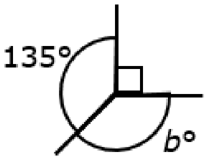
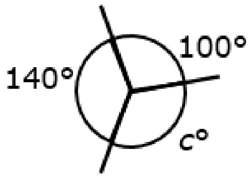
4.

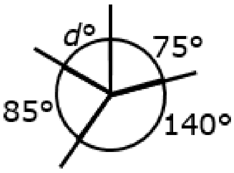
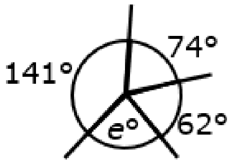
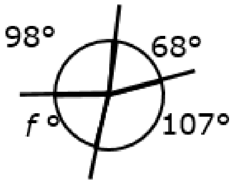


o = _____ °
p = _____ °
q = _____ °
r = _____ °
s= _____ °
t = _____ °

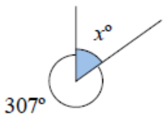
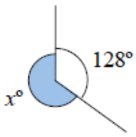
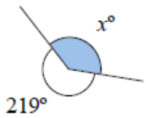
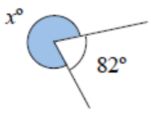
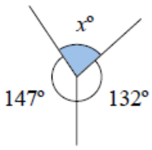
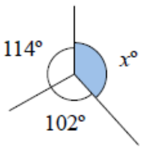
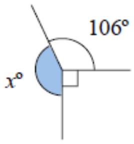
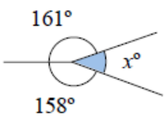
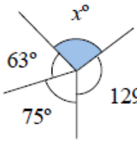
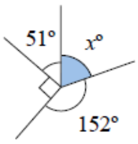
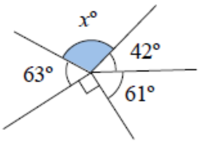
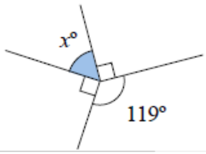
Friday 17th April - Mild - Angles around a point

Use what you know of angles around a point to complete the following. The first one has been done for you.

Question 1:	Find the missing angles and show your working.	
		
$95 + 155 = 250°$ $360° - 250° = 110°$ $\underline{a = 110°}$		
a° =	b° =	c° =

Question 2:	Find the missing angles and show your working.	
		
d° =	e° =	f° =

Friday 17th April – Spicy – Calculate the missing angles around a point.

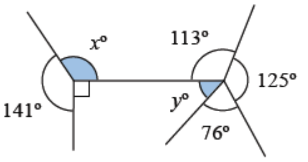
A1 Find the value *x* 	**A2** Find the value *x* 	**A3** Find the value *x* 	**A4** Find the value *x* 
B1 Find the value *x* 	**B2** Find the value *x* 	**B3** Find the value *x* 	**B4** Find the value *x* 
C1 Find the value of *x* 	**C2** Find the value of *x* 	**C3** Find the value of *x* 	**C4** Find the value of *x* 

Friday 17th April - Hot

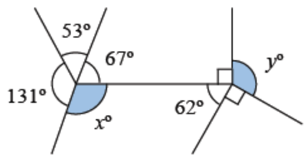
Find the missing angles around a point. You might also need to use what you know about right angles, angles on a straight line and vertically opposite angles.

A1 Three angles measure 97°, 145° and 118°.
Do these three angles fit exactly around a point?
Explain your answer.

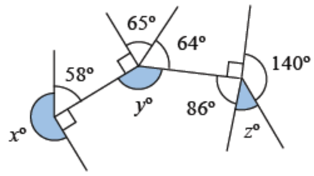
A2 Find the values of x and y



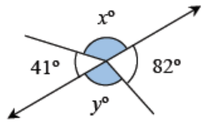
A3 Find the values of x and y



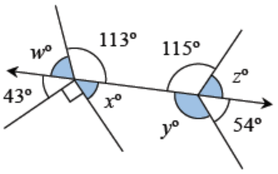
A4 Find the values of x, y and z



B1 Find the values of x and y

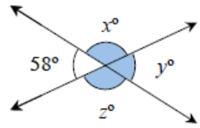


B2 Find the values of w, x, y and z

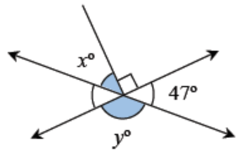


B3 Five angles measure 78°, 95°, 113°, 162° and 187°.
Which of them can be put together to fit exactly around a point?

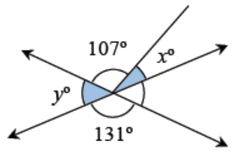
B4 Find the values of x, y and z



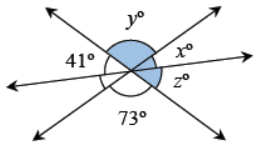
C1 Find the values of x and y



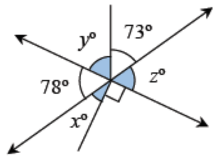
C2 Find the values of x and y



C3 Find the values of x, y and z



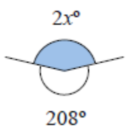
C4 Find the values of x, y and z



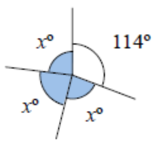
Friday 17th April - Extra Hot:

Use what you know about right angles, angles around a point, angles on a straight line and vertically opposite angles in order to calculate the missing angles.

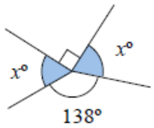
A1 Find the value of x



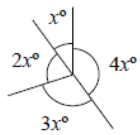
A2 Find the value of x



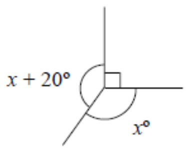
A3 Find the value of x



A4 Find the size of each of the four angles

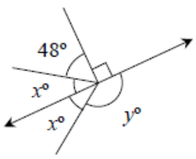


B1 Find the value of x

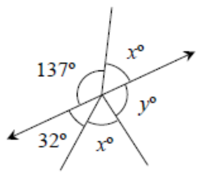


B2 Three angles fit exactly around a point.
The second angle is 20° more than the first angle.
The third angle is twice the size of the second angle.
Find the size of each of the three angles.

B3 Find the values of x and y

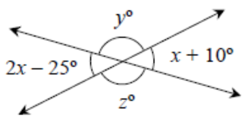


B4 Find the values of x and y

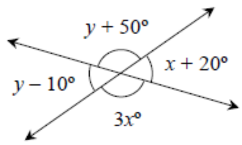


C1 Three angles fit exactly around a point.
Two of the angles are equal.
The difference between the largest and smallest angle is 30°
Find the size of each of the three angles.

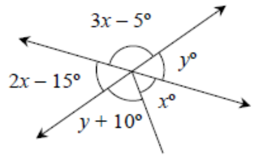
C2 Find the values of x, y and z



C3 Find the values of x and y

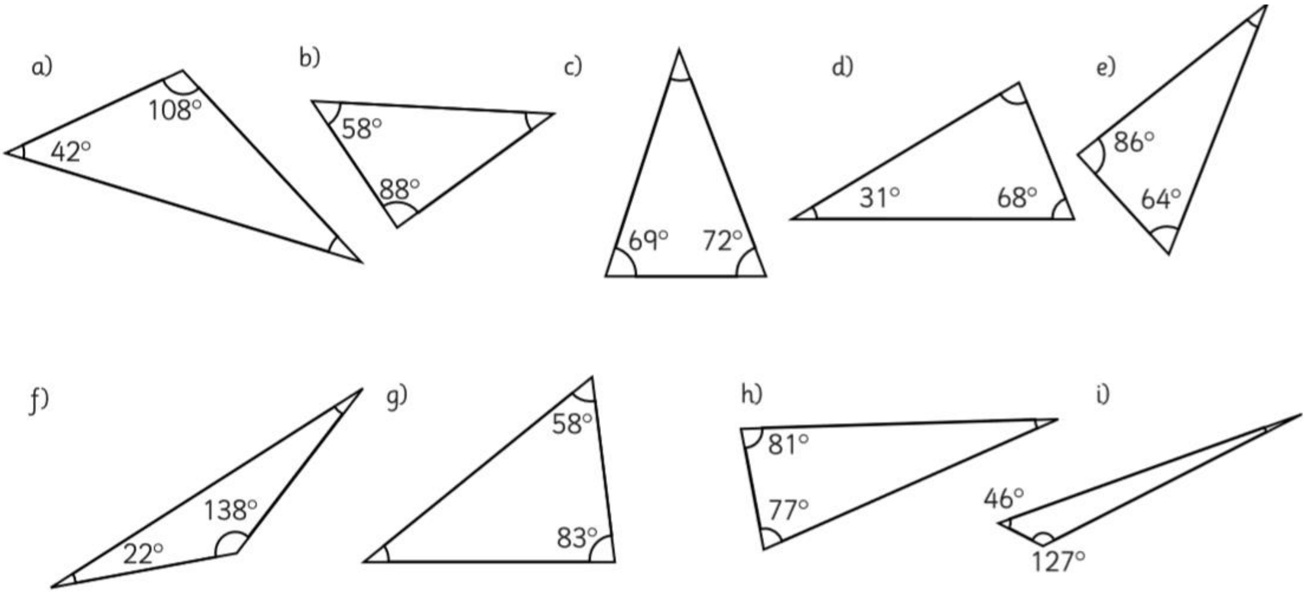


C4 Find the values of x, y and z



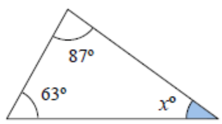
Monday 20th April – Mild – angles in a triangle:

Use your knowledge of angles in a triangle to work out what the missing angles would be. Remember, angles in a triangle add up to 180°.

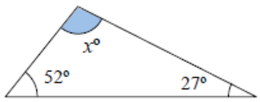


Monday 20th April – Spicy – angles in a triangle:

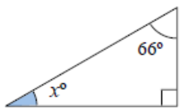
A1 Work out the value of x.



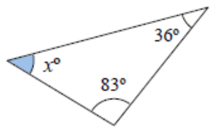
A2 Work out the value of x.



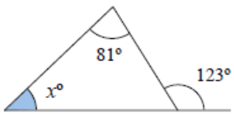
A3 Work out the value of x.



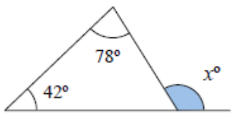
A4 Work out the value of x.



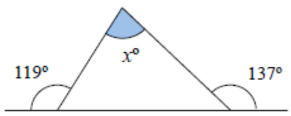
B1 Work out the value of x.



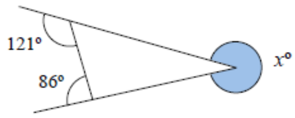
B2 Work out the value of x.



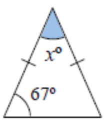
B3 Work out the value of x.



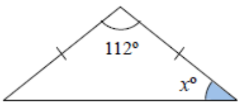
B4 Work out the value of x.



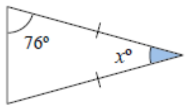
C1 Work out the value of x.



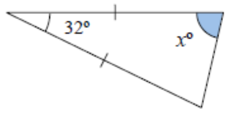
C2 Work out the value of x.



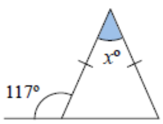
C3 Work out the value of x.



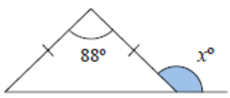
C4 Work out the value of x.



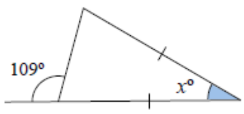
D1 Work out the value of x.



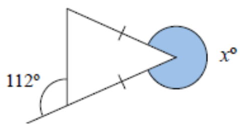
D2 Work out the value of x.



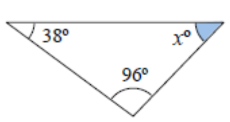
D3 Work out the value of x.

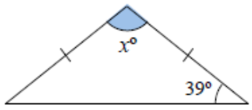


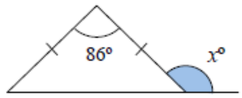
D4 Work out the value of x.

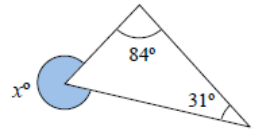


Monday 20th April – Hot – angles in a triangle

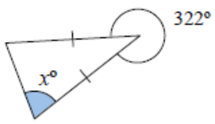




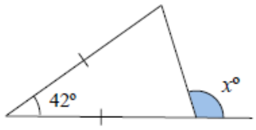




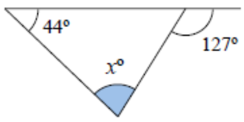
Work out the value of x.



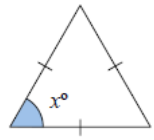
B2 Work out the value of x.



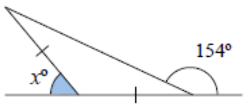
B3 Work out the value of x.



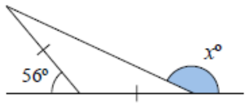
B4 Work out the value of x.



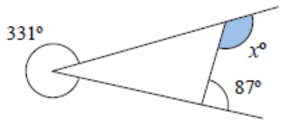
Work out the value of x.



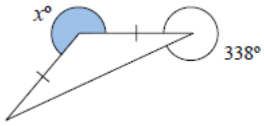
C2 Work out the value of x



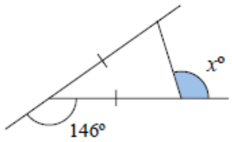
C3 Work out the value of x.



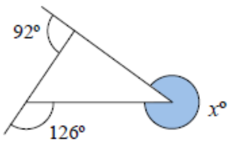
C4 Work out the value of x.



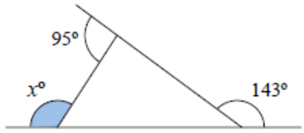
Work out the value of x.



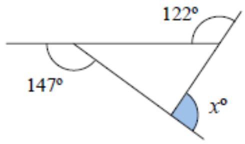
D2 Work out the value of x.



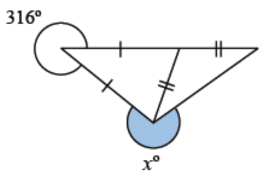
D3 Work out the value of x.

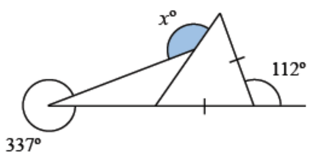


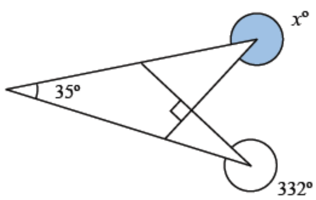
D4 Work out the value of x.



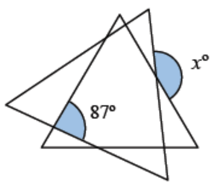
Monday 20th April – Extra Hot – angles in a triangle



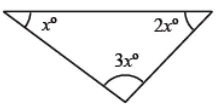




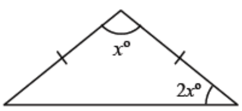
Find the value of x



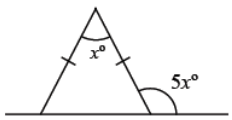
B1 Find the value of x



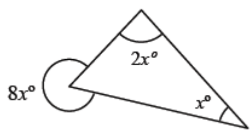
B2 Find the value of x



B3 Find the value of x



B4 Find the value of x



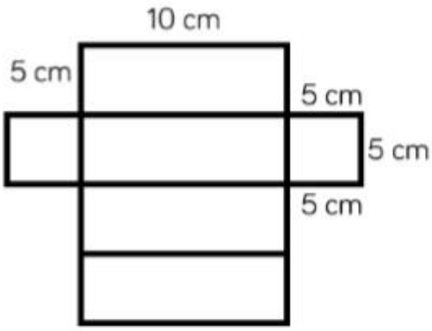
Tuesday 21st April – see separate PDF files on class 6 section of school website.

Wednesday 22nd April – Please complete the questions below.

What three-dimensional shape can be made from these nets?

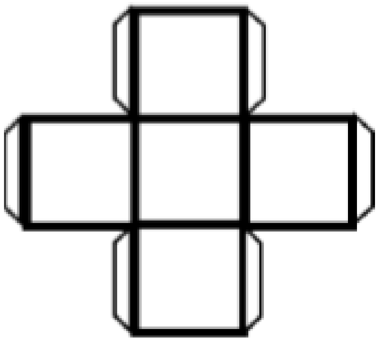
Identify and describe the faces of each shape.

Accurately draw this net.
Cut, fold and stick to
create a cuboid.



Draw possible nets of these three-dimensional shapes.

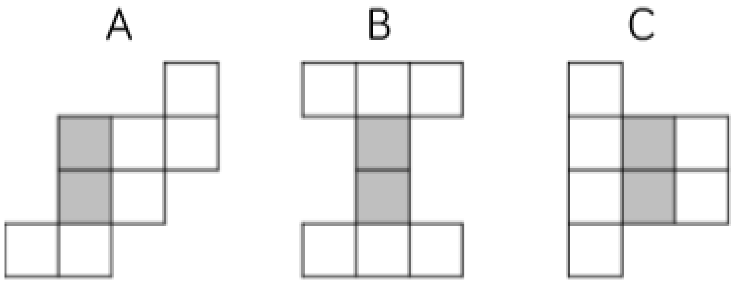
Dora thinks that this net will fold to create a cube.



Do you agree with Dora?
Explain your answer.

Here is an open box.

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

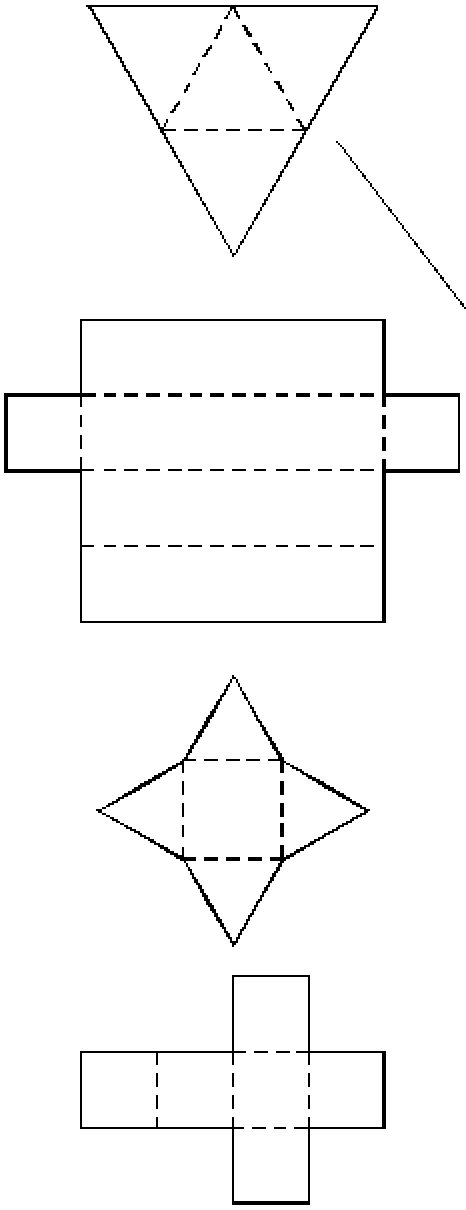


How do you know?

Thursday 23rd April - Mild

Q1. These nets will fold to make 3-D shapes.

Match each net to the name of its shape.



square – based pyramid

triangular prism

cube

square

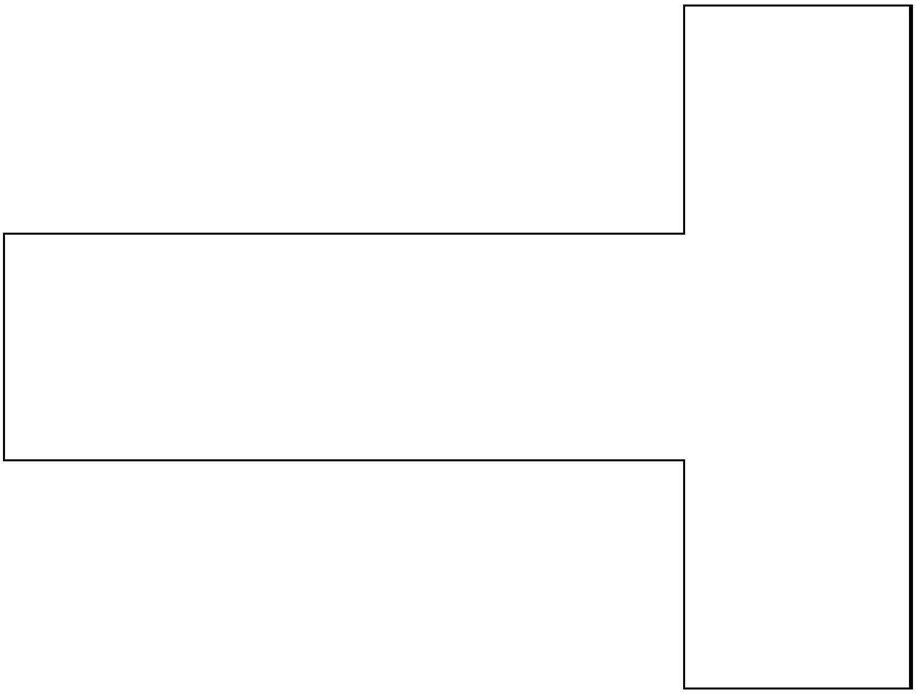
tetrahedron

cuboid

1 mark

Q2. Draw in lines where you would fold this shape to make a cube.

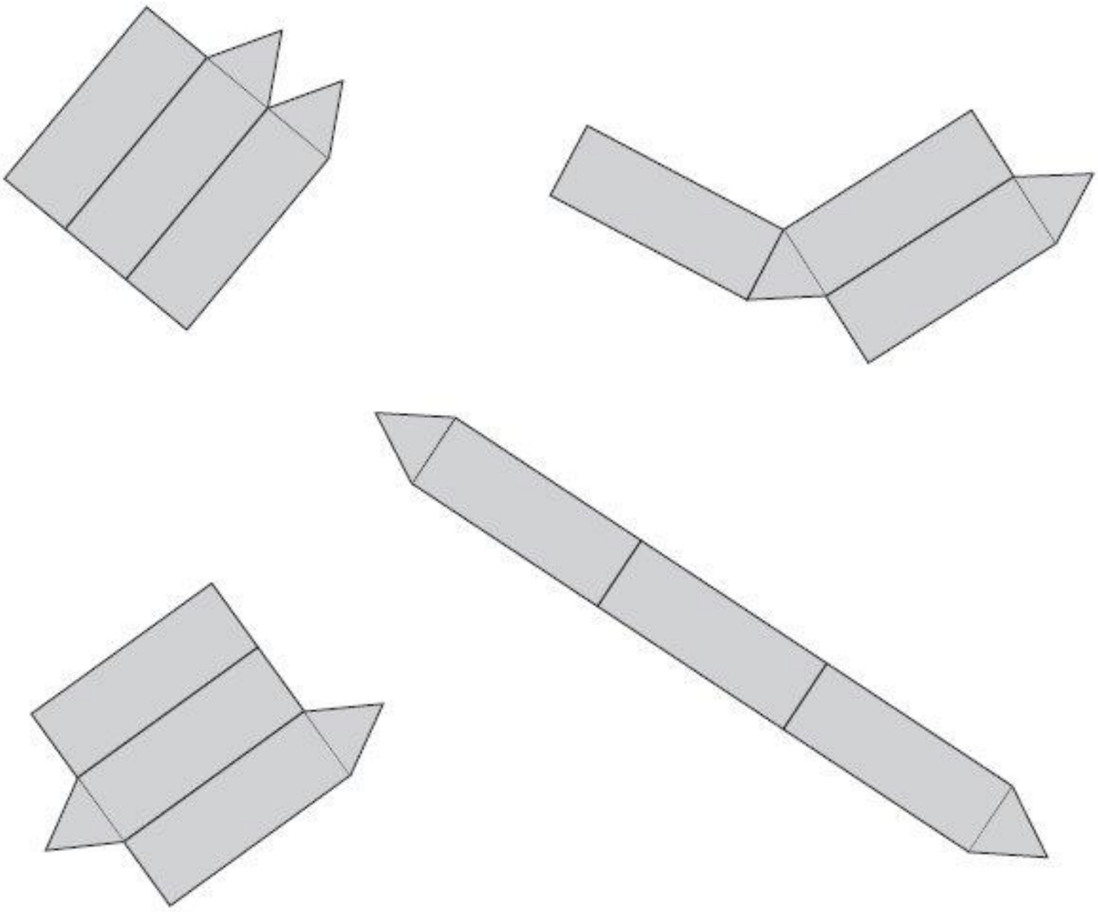
Use a ruler to measure where they would go.



1 mark

Q3. **Two** of these diagrams are nets for a triangular prism.

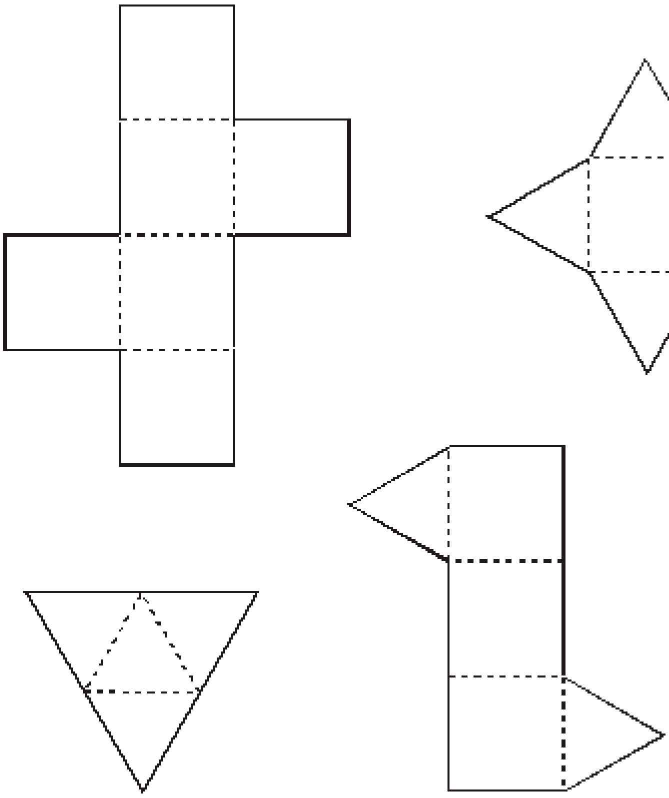
Put a tick (✓) in them.



1 mark

Q4. Here are some nets of shapes.

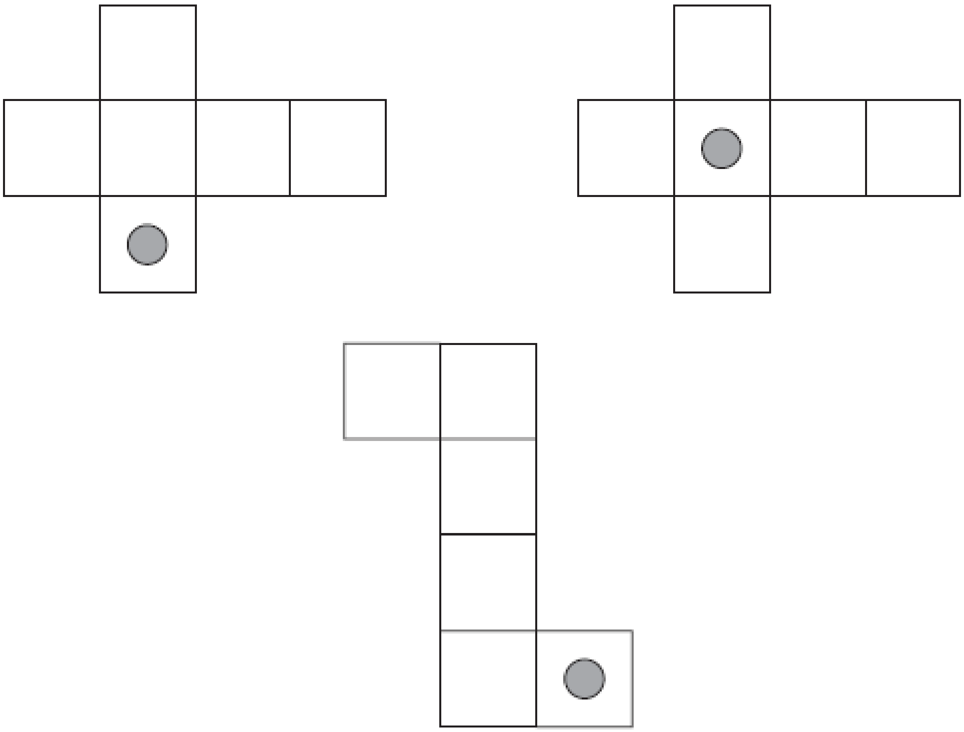
For each net, put a tick (✓) if it folds to make a **pyramid**.
Put a cross (✗) if it does not.



1 mark

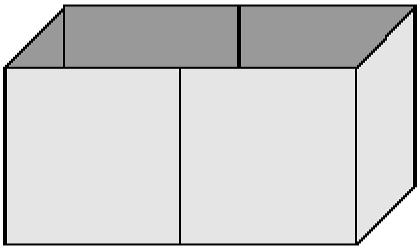
Q5. Here are three nets of a cube.

On each net draw **one more dot** so that each cube will have dots on **opposite** faces.



2 marks

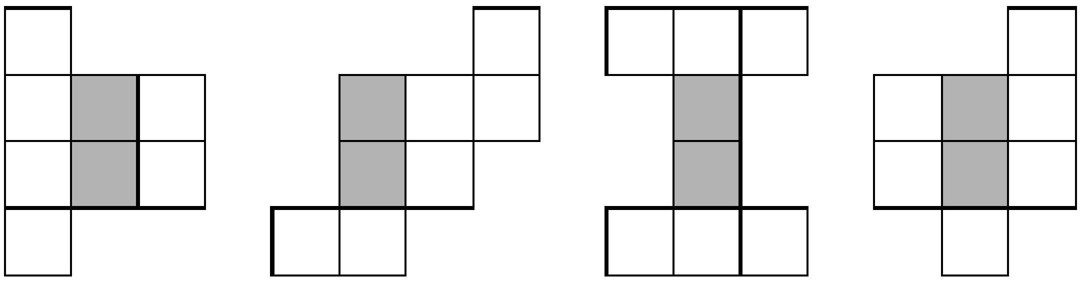
Q1. This is an open top box.



Put a tick (✓) for each diagram **if it is a net** for the box.

Put a cross (✗) if it is not.

The base is shaded in each one.



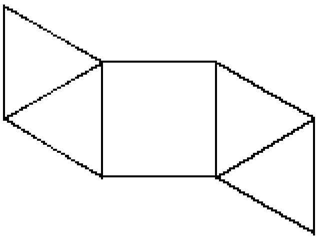
A B C D

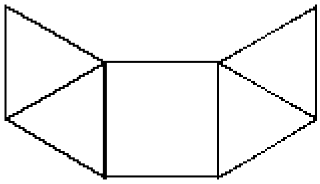
2 marks

Q2. Look at each of these diagrams.

Put a tick (✓) if it is the **net of a square based pyramid.**

Put a cross (✗) if it is **not.**





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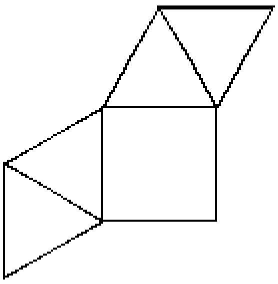
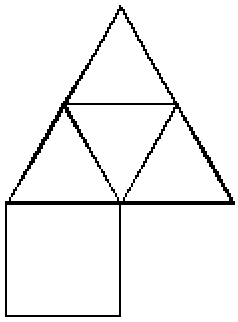
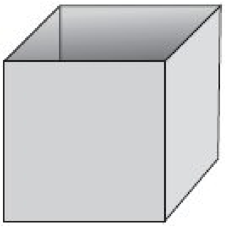




. . . .

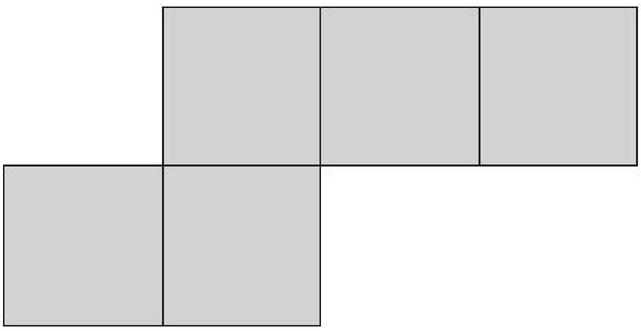
2 marks

Q3. Here is an **open top** cube.



Here is the net from which it is made.

Put a tick (✓) on the square which is its **base**.

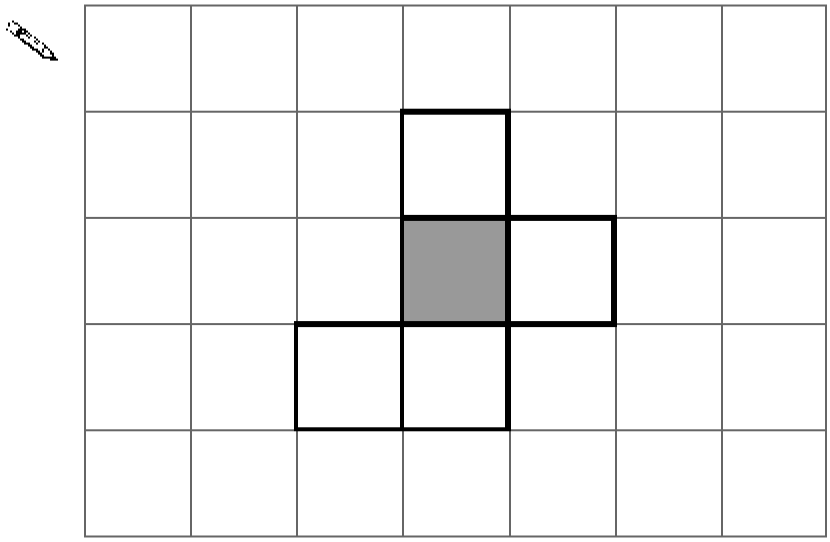


1 mark

Q4. Here is the net of a cube with no top.

The shaded square shows the bottom of the cube.

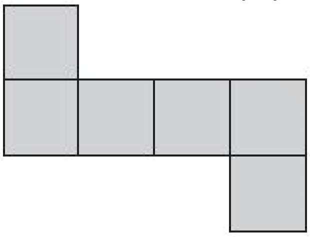
Draw an extra square to make the net of a cube which does have a top.

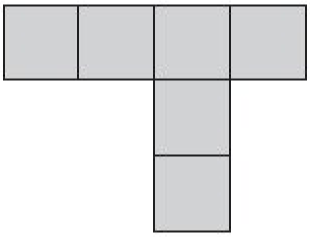


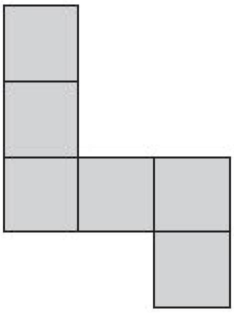
1 mark

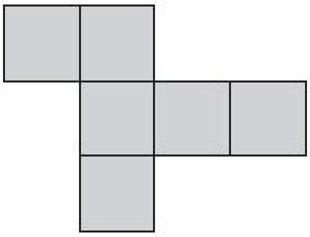
Q5. Here are four diagrams.

On each one put a tick (✓) if it is a net of a cube.
Put a cross (✗) if it is not.





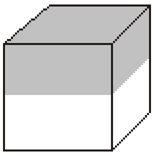




2 marks

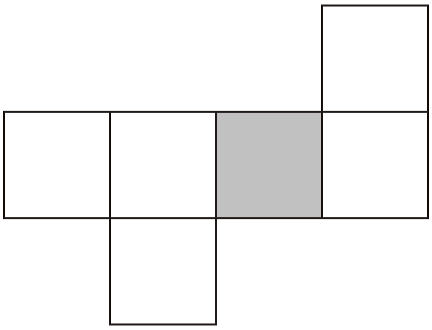
Q6. Here is a cube.

The cube is shaded all the way round so that the top half is grey and the bottom half is white.



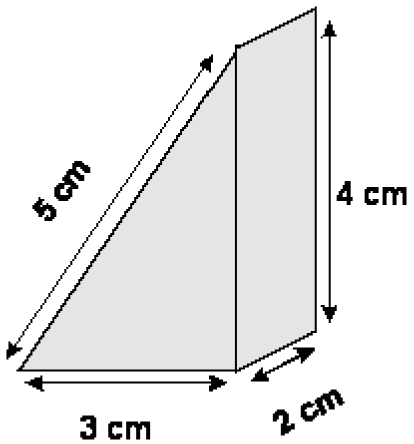
Here is the net of the cube.

Complete the shading



2 marks

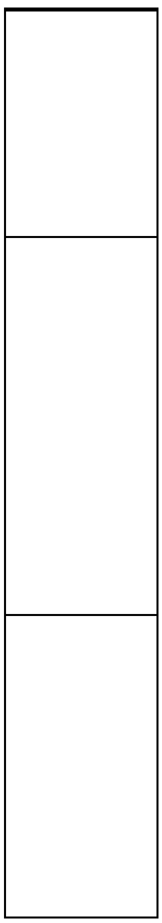
Q1. Here is a triangular box.



Below is part of the net of the box, but **two** of its faces are missing.

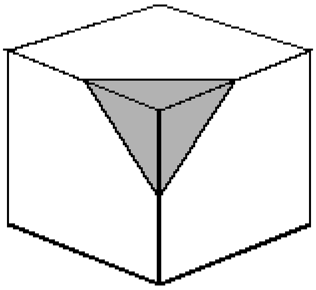
Draw **accurately**, full size, **ONE** of the missing faces on the diagram below.

You can use a ruler and protractor (angle measurer).



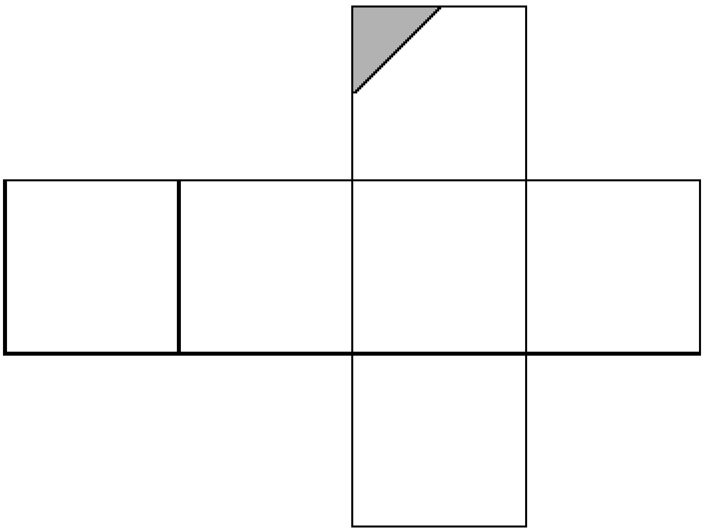
2 marks

Q2. A cube has shaded triangles on three of its faces.



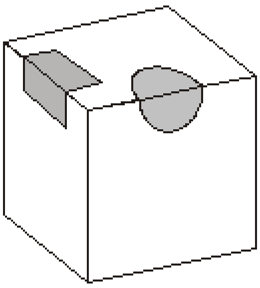
Here is the net of the cube.

Draw in the two missing shaded triangles.



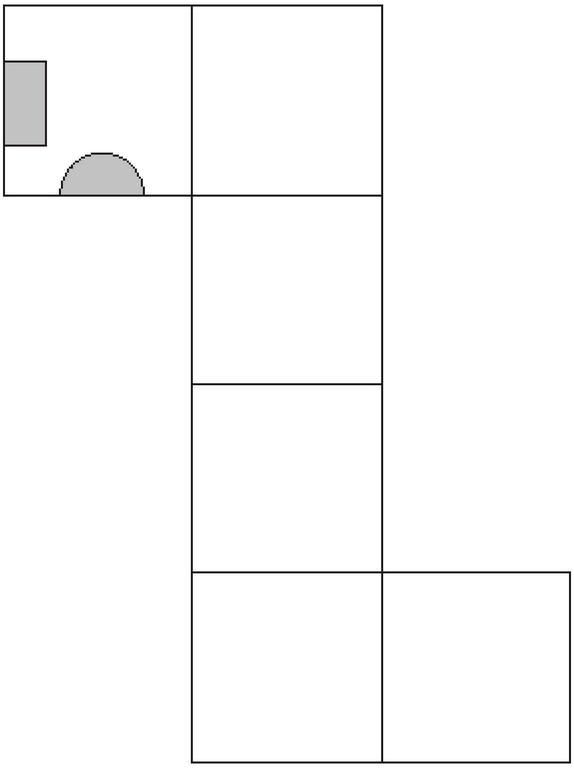
1 mark

Q3. A cube has shaded shapes on three of its faces.



Here is a net of the cube.

Draw in the two missing shaded shapes.



1 mark