

YEAR 4- MATHS

WB- Monday 8th June

We are using Oaks National Academy this week, the topic is shape and symmetry. Each day you will have a different video link and then the work sheets will be attached as usual. Remember to practise your times tables with games like hit the button to increase your speed.

Monday- To compare and order angles.

Tuesday- To identify right angles.

Wednesday- To identify acute and obtuse angles.

Thursday- To investigate angles within a shape.

Friday- To solve problems based on angles.

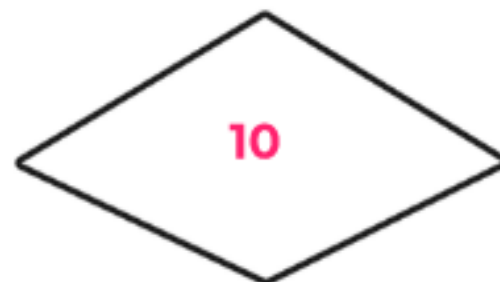
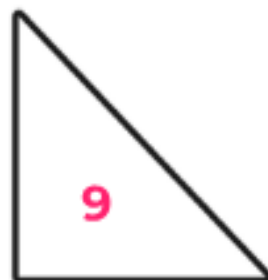
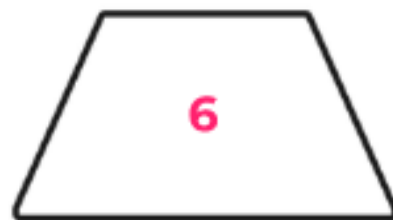
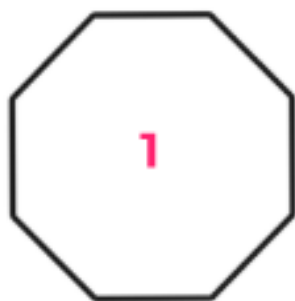


Monday- To compare and order angles.



To Start

How many of the shapes can you name?



To Start

How many of the shapes can you name?



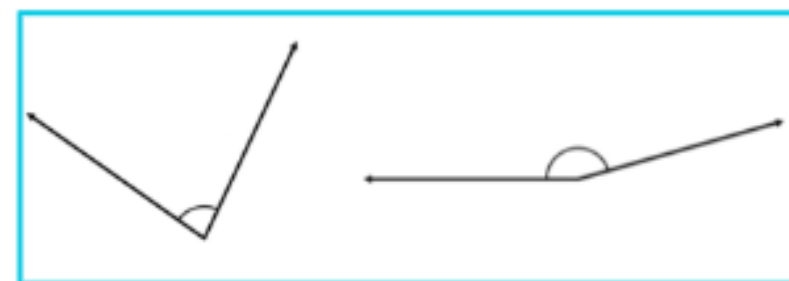
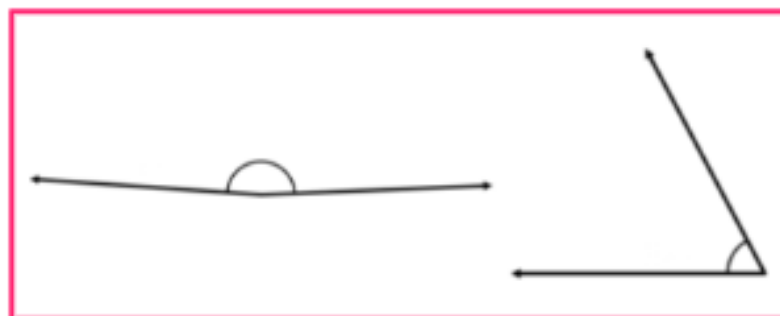
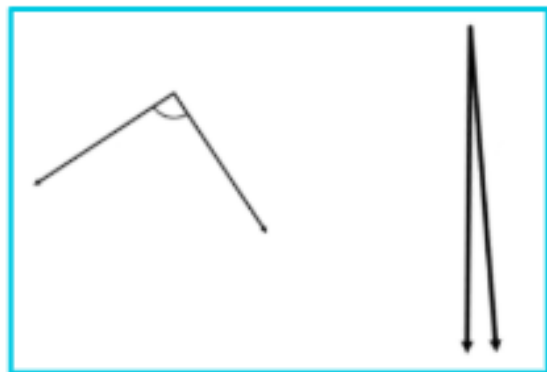
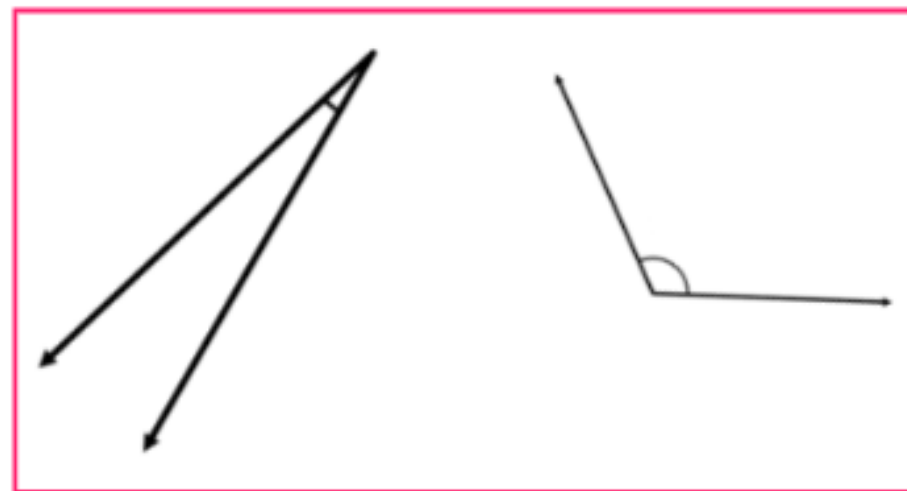
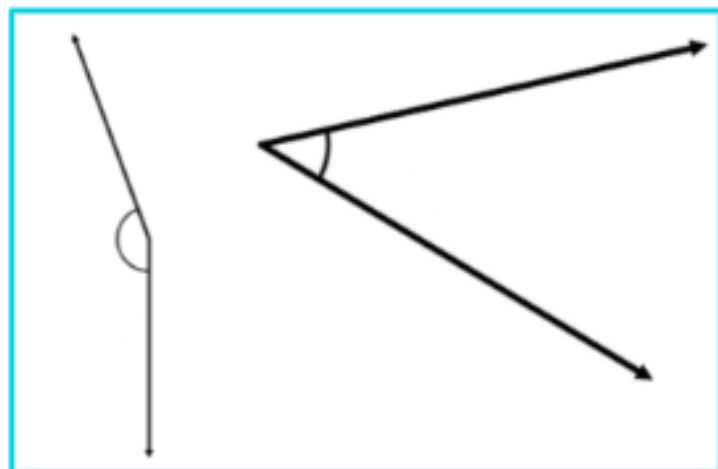
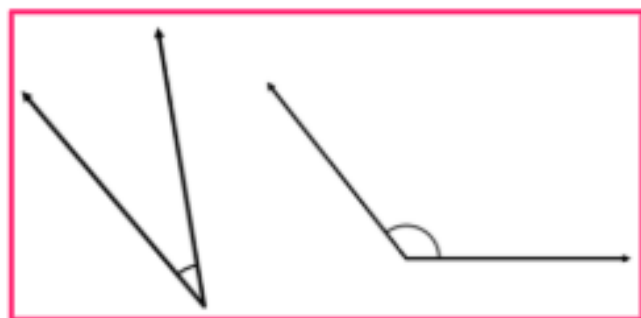
Shape number	Name	Shape number	Name
1		6	
2		7	
3		8	
4		9	
5		10	



Moving on

Tick the angle in each pair that is larger. If you are unsure try using an angle finder (explained in the lesson)

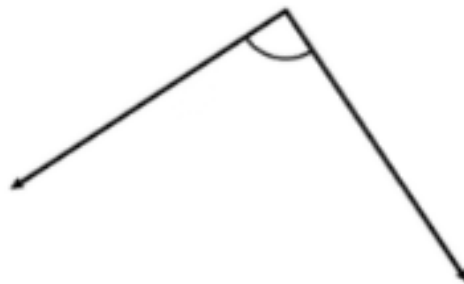
Can you spot the right angle? Circle it



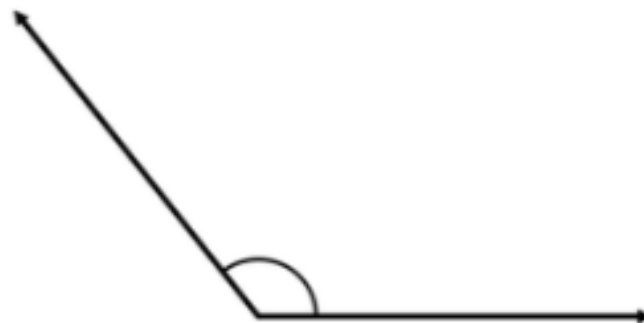
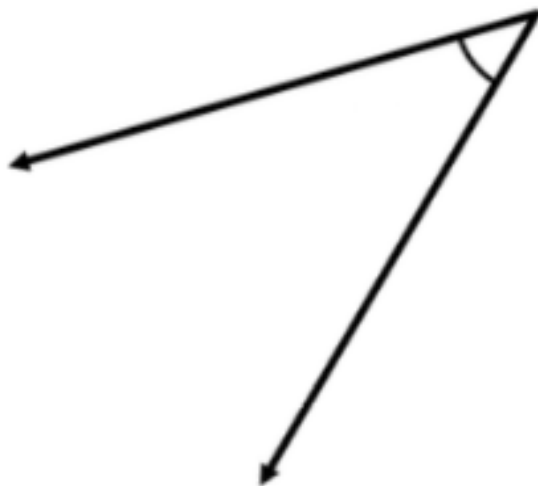
Main Task

For each set of angles, decide which is the smallest. Number this 1. Then number 2, 3 and 4 from smallest to largest. (1 = smallest, 4 = largest)

a)



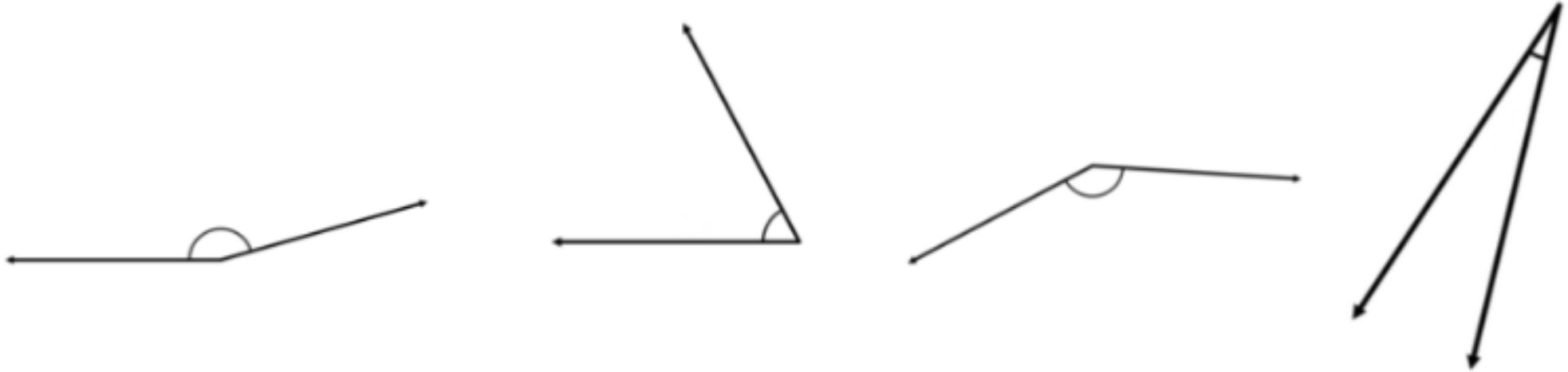
b)



Main Task

For each set of angles, decide which is the smallest. Number this 1. Then number 2, 3 and 4 from smallest to largest. (1 = smallest, 4 = largest)

c)

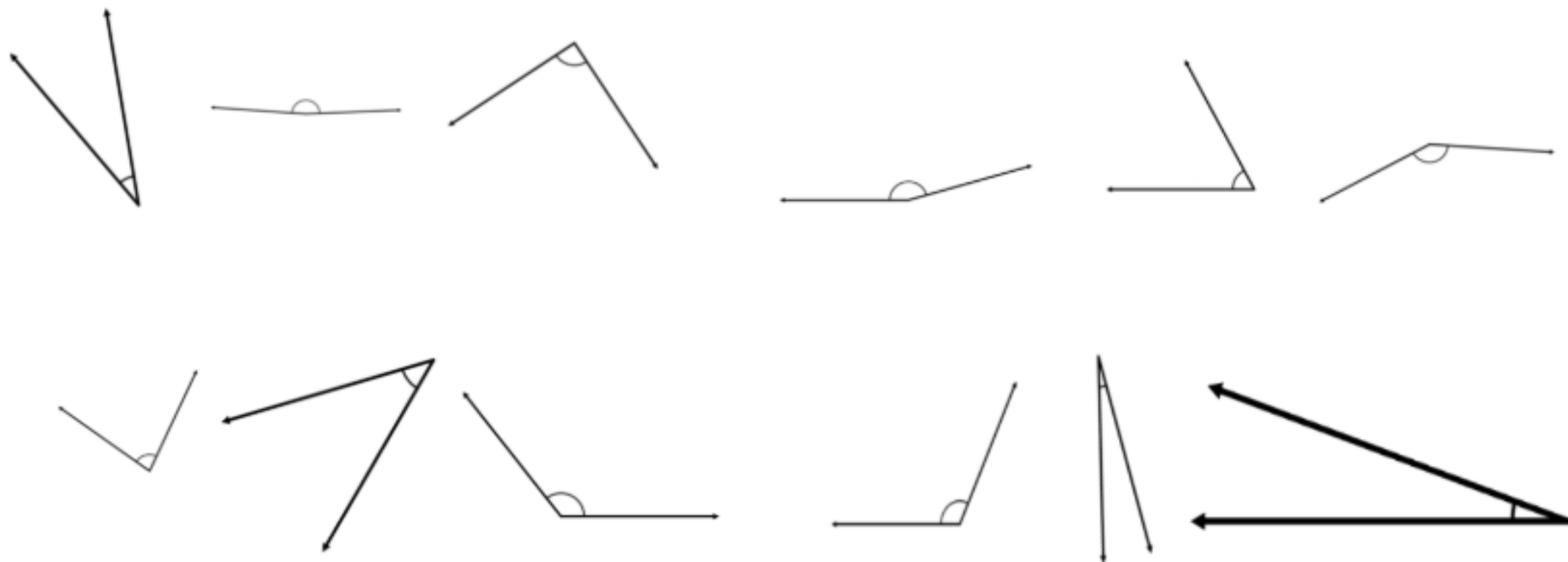


d)



Main Task - extension.

Which 3 angles do you think are closest to being right angles? Circle the 3 you think

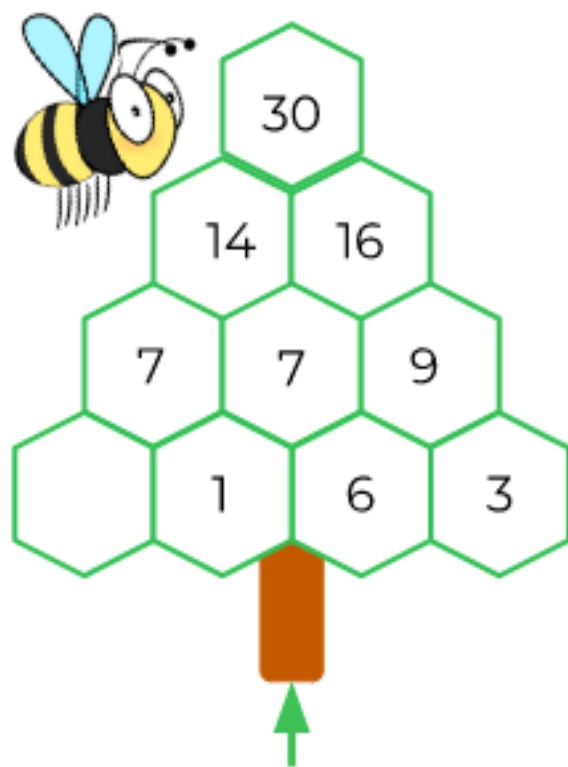


Tuesday- To identify right angles.

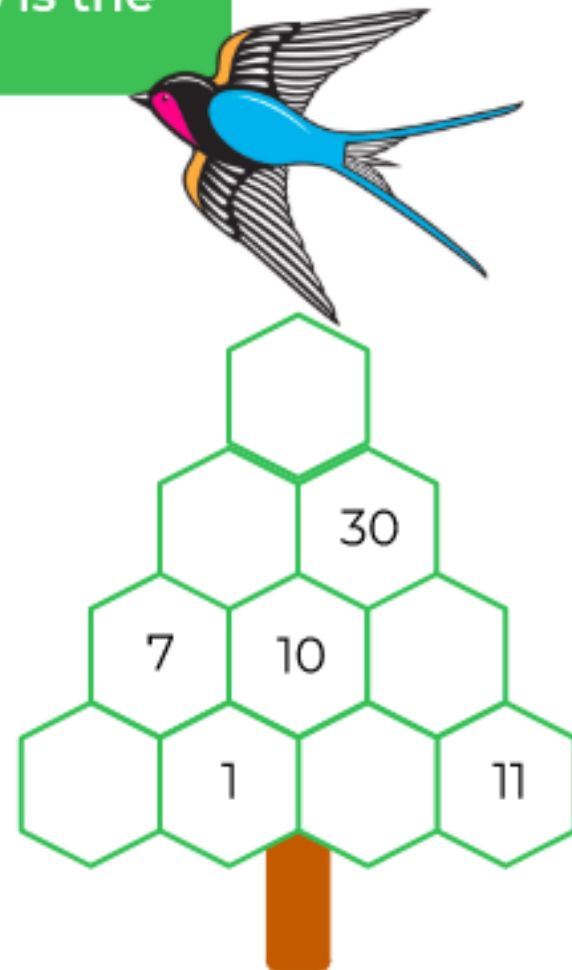
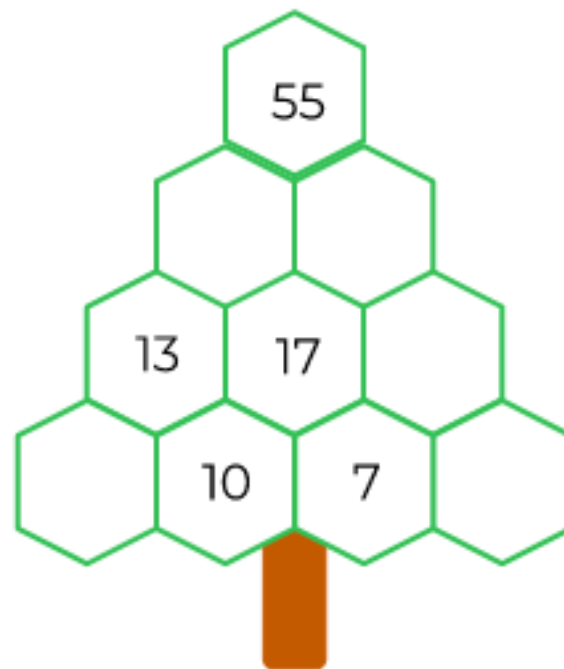
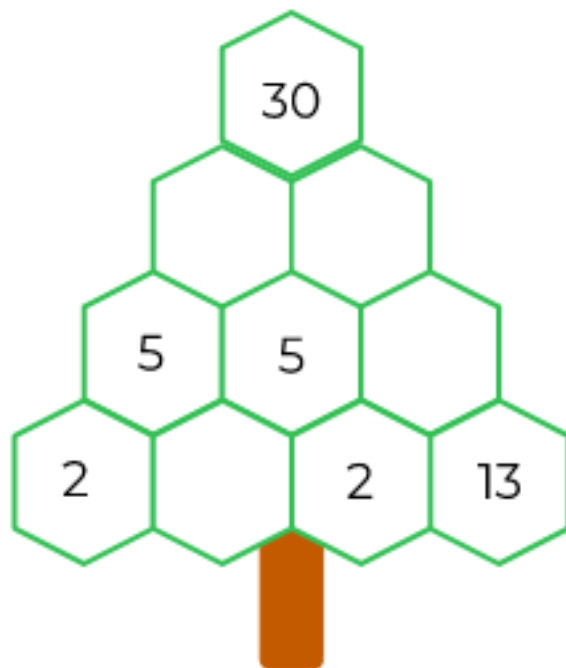


To Start

Complete the number trees. The number at the top is the sum of the two numbers below it.

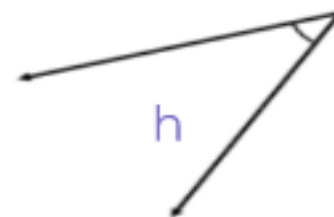
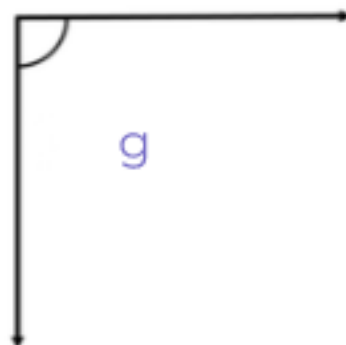
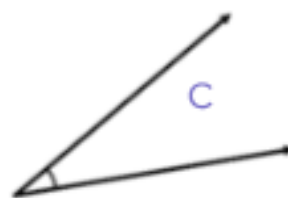
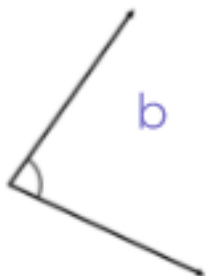


This one has been
ALMOST completed for
you



Moving on

Spot the right angles. First, try to just spot them using your judgement, then use the angle measurer to check your ideas.



Moving on

Spot the right angles. First, try to just spot them using your judgement, then use the angle measurer to check your ideas.

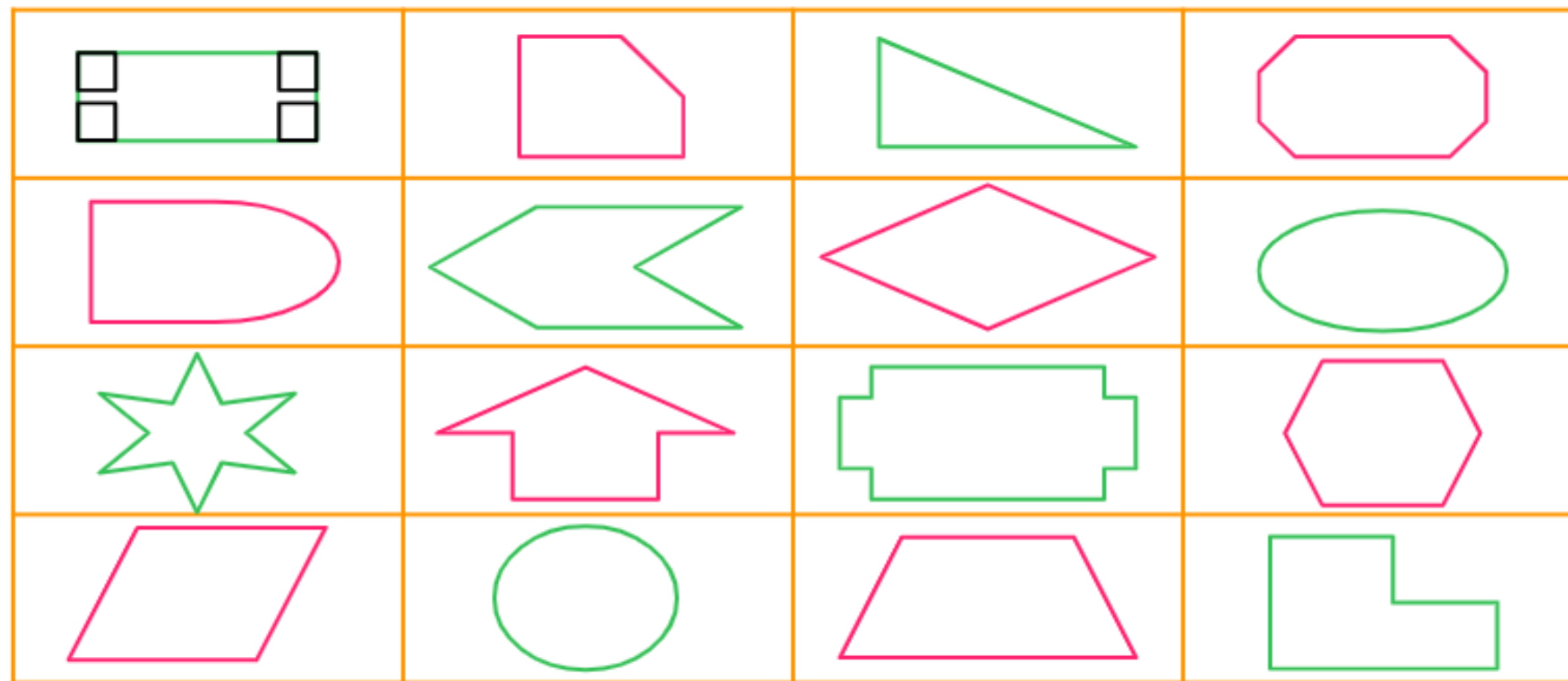
	a	b	c	d	e	f	g	h	i
Right angle									
Not a right angle									

Remember: a right angle is like the corner of a square



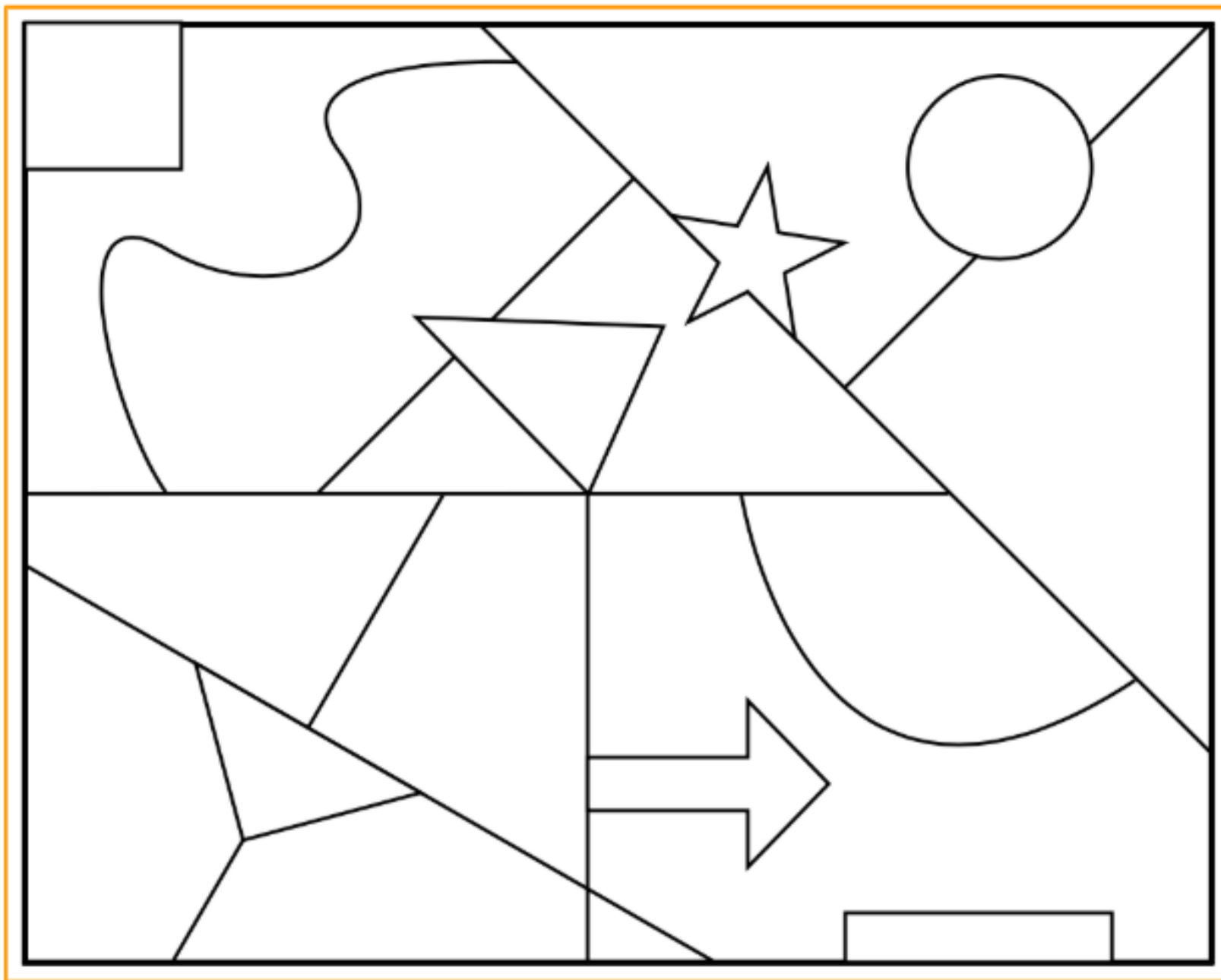
Main task

Look at the shapes below, can you spot the right angles? Look for right angles **INSIDE** the shapes and mark them with a small square. The first one has been done for you.



Challenge

How many right angles can you spot in the picture? Mark them off in the same way as we did before with a small square



Wednesday- To identify acute and obtuse angles.



To Start

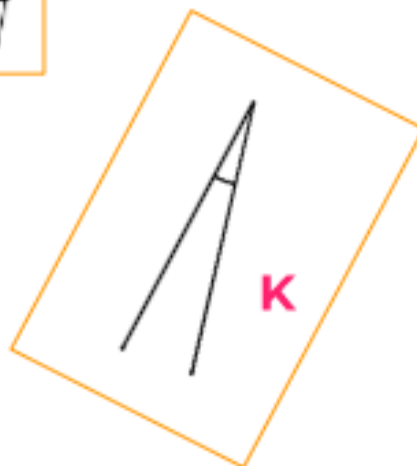
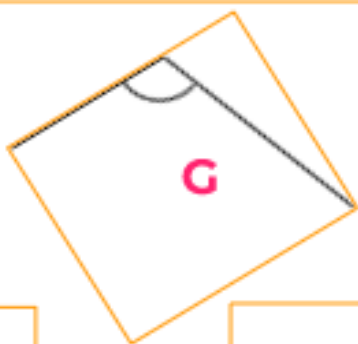
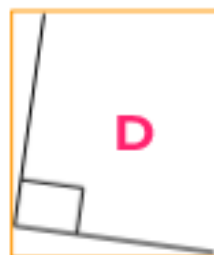
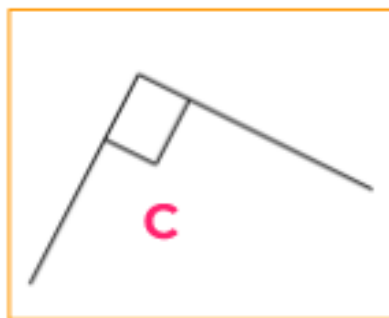
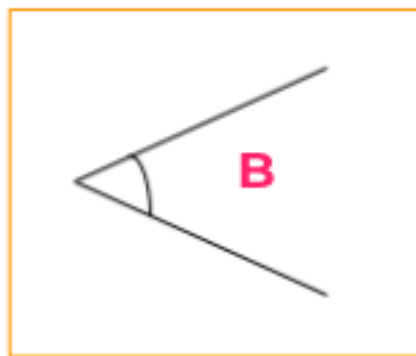
Times tables speed challenge

	3	4	8	2	5	10	9	6	7
4									
7									
8									
10									
6									
9									
11									
12									
5									



Moving on

Sort the angles into right angle, acute and obtuse. Put the letter of the angle in the correct section of the diagram



Moving on

Sort the angles into right angle, acute and obtuse. Put the letter of the angle in the correct section of the diagram

Right angle	Acute angle	Obtuse angle

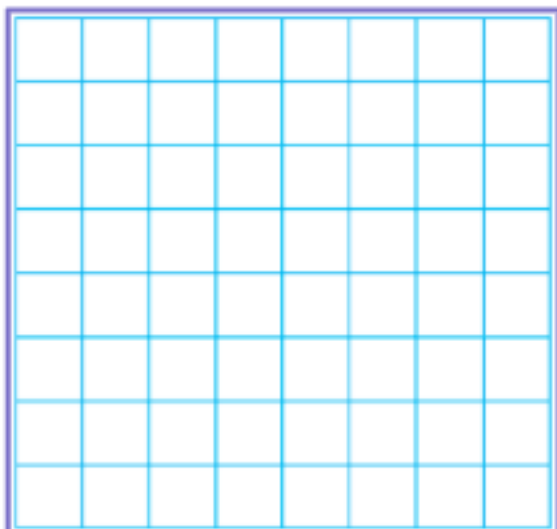
A right angle measures _____.

An acute angle is more than _____ and less than _____.

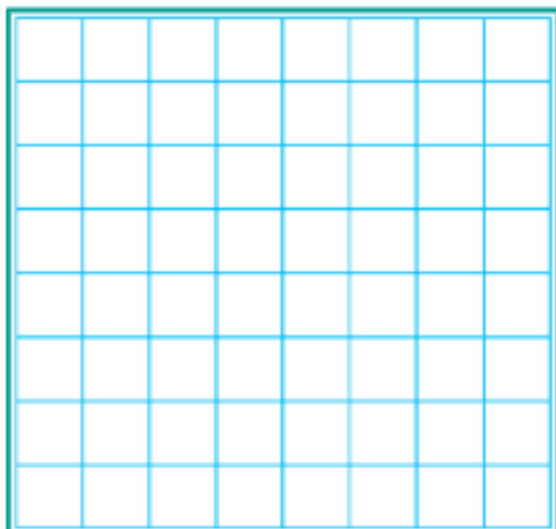
An obtuse angle is more than _____ and less than _____.



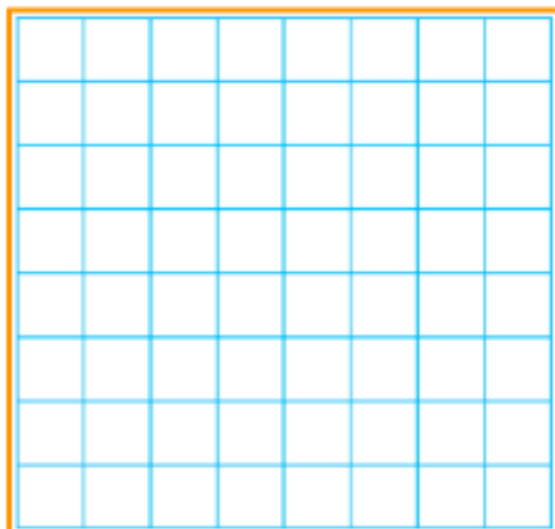
Main activity - Draw angles based on the criteria.



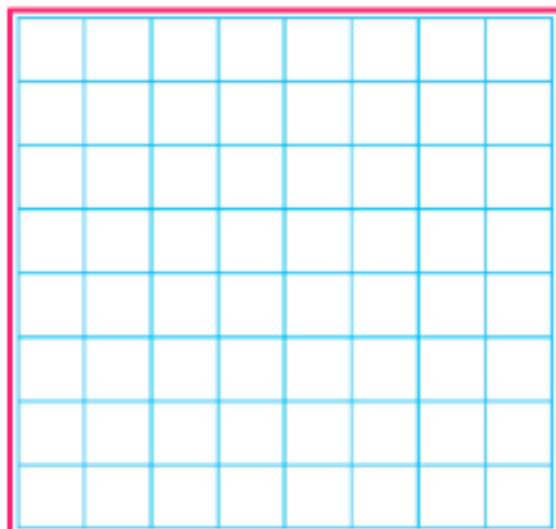
Draw 2 different acute angles. Use a ruler to stay neat.



Draw 2 different obtuse angles. Use a ruler to stay neat.



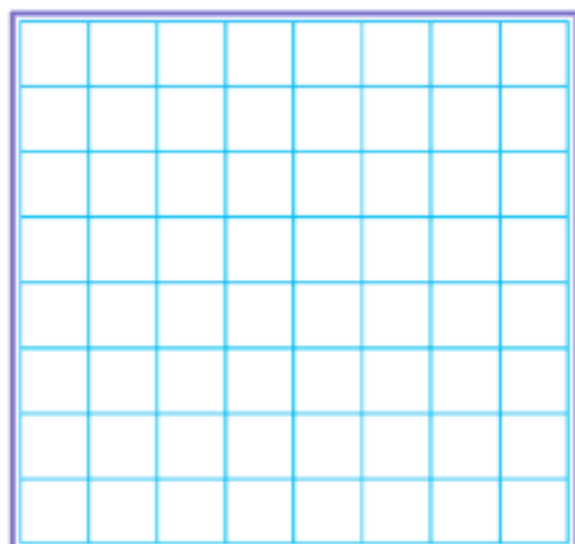
Draw a triangle with 1 obtuse angle.



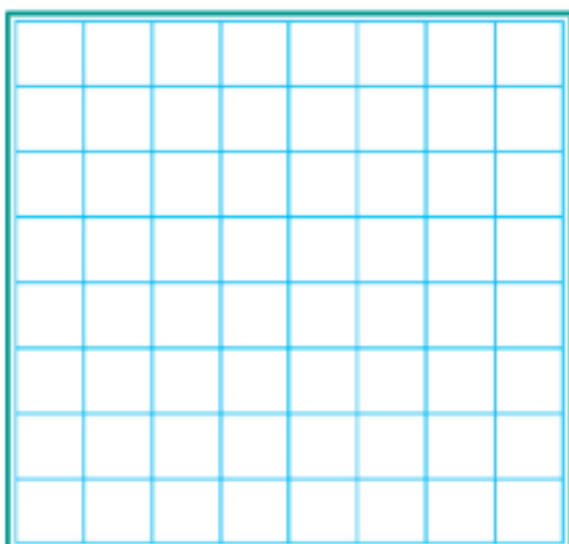
Draw a triangle that has 1 right angle.



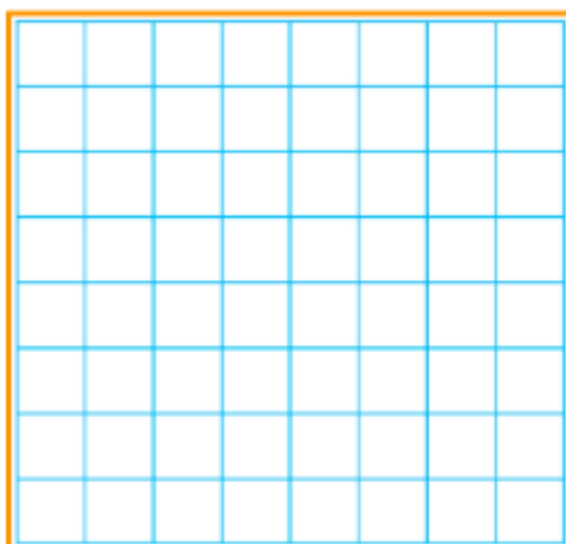
Main activity - Draw angles based on the criteria.



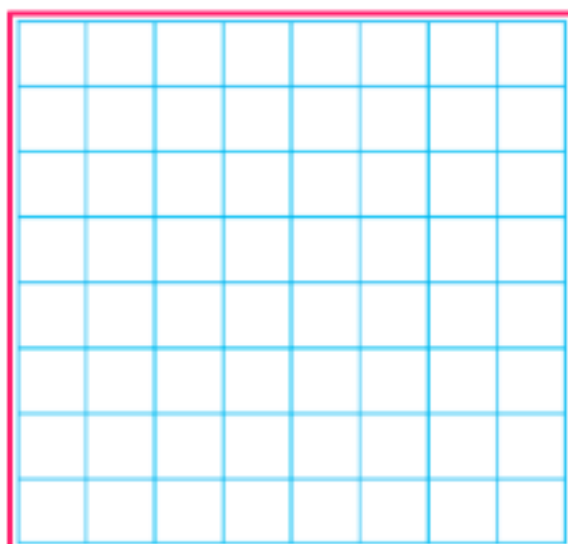
Draw a quadrilateral with 2 acute angles



Draw a quadrilateral with 2 right angles



Draw a pentagon with only 1 acute angle.



Draw a pentagon with a total of 3 acute angles.



Challenge

Pick 3 of these flags and write sentences to describe the pattern on them. Describe very clearly any type of angles you can see in that design.

Colombia

Venezuela

Bolivia

Suriname

Ecuador

Guyana

French Guiana

Brazil

Peru

Paraguay

Chile

Argentina

Uruguay



Thursday- To investigate angles within a shape.

<https://www.thenational.academy/year-4/maths/shape-and-symmetry-to-investigate-angles-within-shapes-year-4-wk6-4>



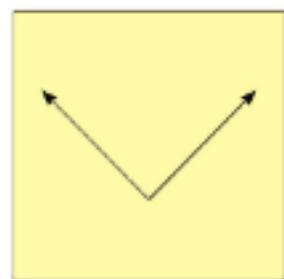
To Start

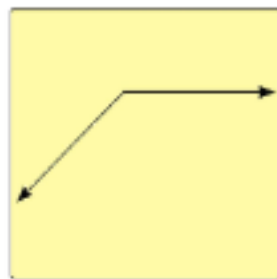
Take a look at the sequences below, can you complete them by filling in the missing numbers and saying the rule. The first one has been done for you.

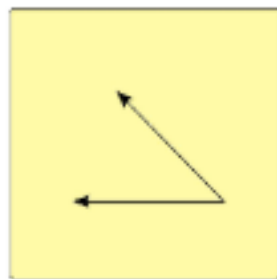
Sequence	Rule
25, 30, 35, 40, 45, 50	Adding 5 every time
____, 104, 106, ____, ____, 112	
10, 9.8, 9.6, ____, ____, 9, ____	
13, ____, ____, 22, 25, ____, 31	
2000, 1000, 500, ____, 125, ____	
316, 304, 292, ____, ____, ____	
13, 26, ____, 104, ____, ____, 832	

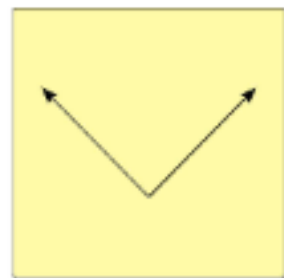


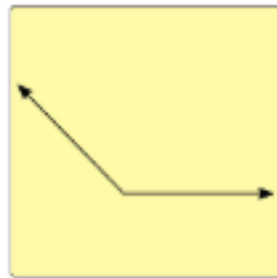
Moving On - label the angles as acute, obtuse or right angle

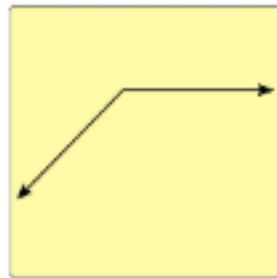


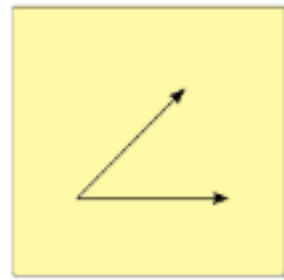


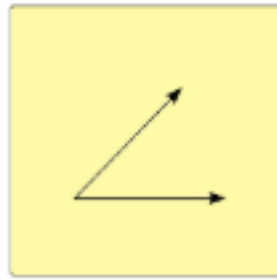


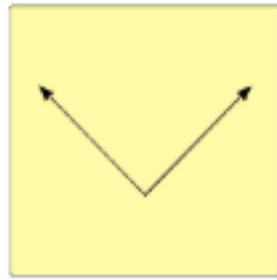










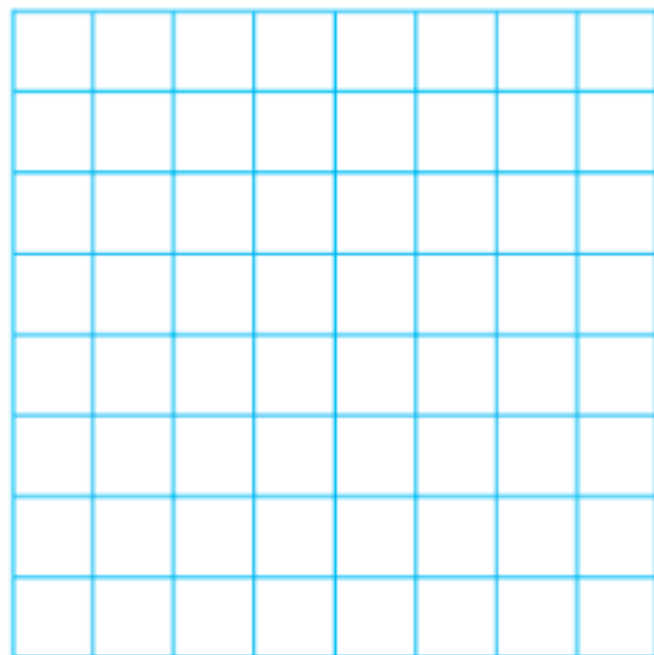




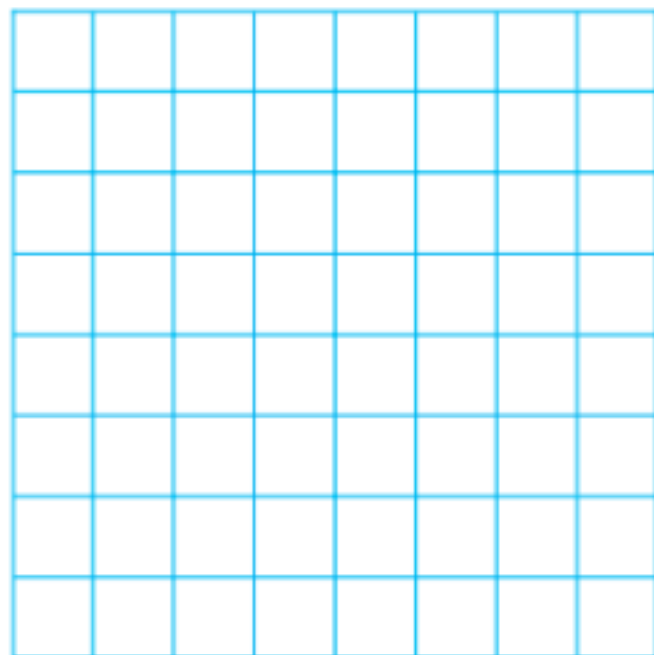
Main Task - 1

Read the statements carefully. You must decide if they are **SOMETIMES** true, **ALWAYS** true or **NEVER** true. Use a diagram or 2 for each to prove your thinking.

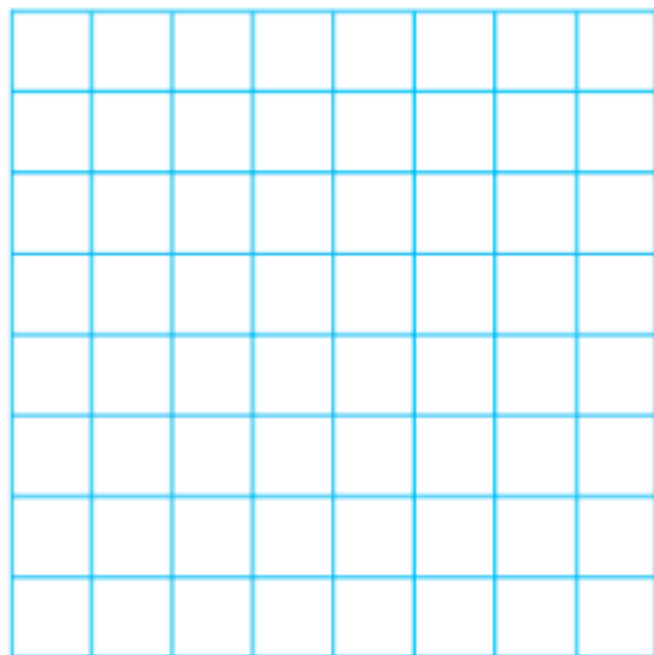
A triangle cannot have two obtuse angles.



A five sided shape does not have any acute angles.



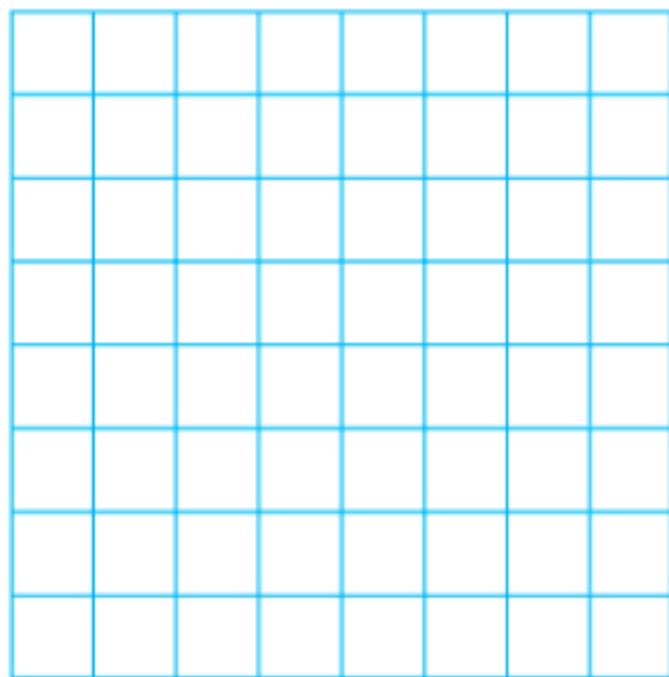
A four sided shape has four right angles.



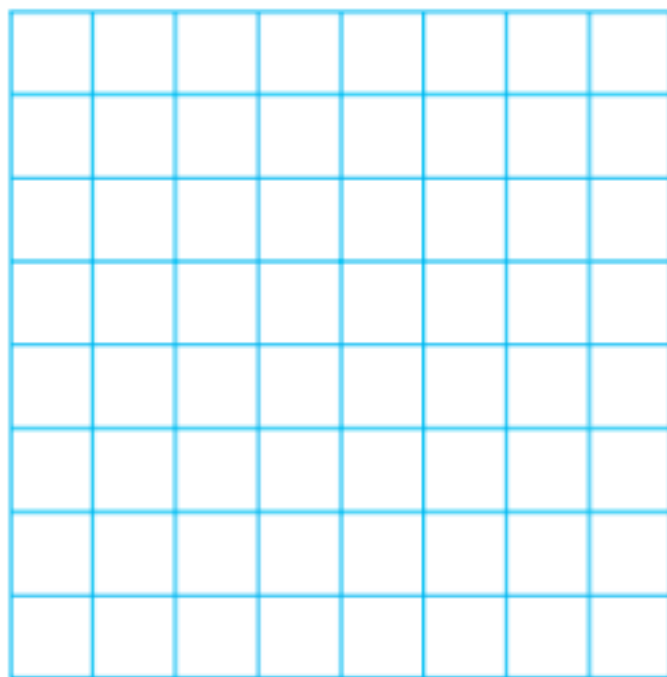
Main Task - 2

Read the statements carefully. You must decide if they are **SOMETIMES** true, **ALWAYS** true or **NEVER** true. Use a diagram or 2 for each to prove your thinking.

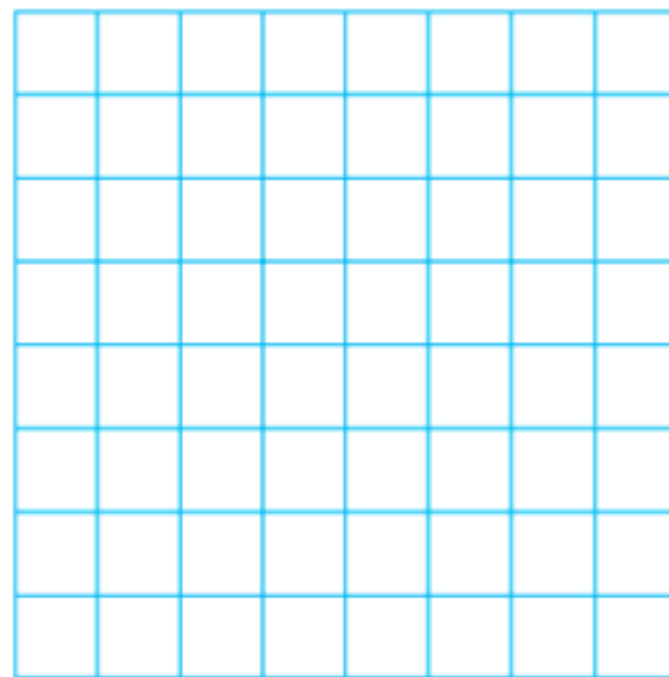
A rectangle has four right angles.



A four sided shape can not have four obtuse angles.



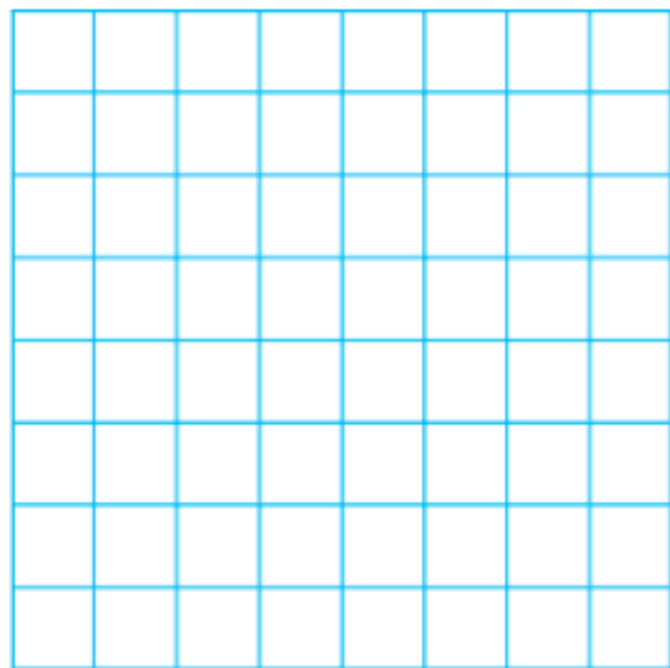
An octagon only has obtuse angles.



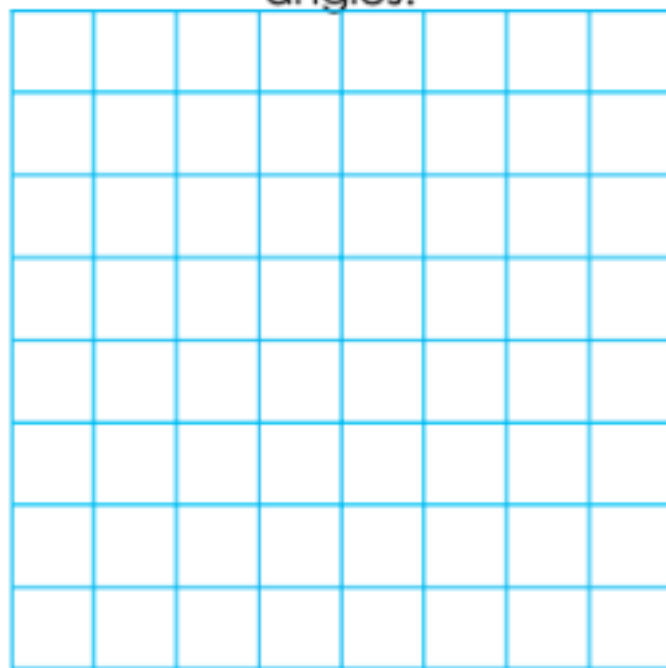
Main Task - 3

Read the statements carefully. You must decide if they are **SOMETIMES** true, **ALWAYS** true or **NEVER** true. Use a diagram or 2 for each to prove your thinking.

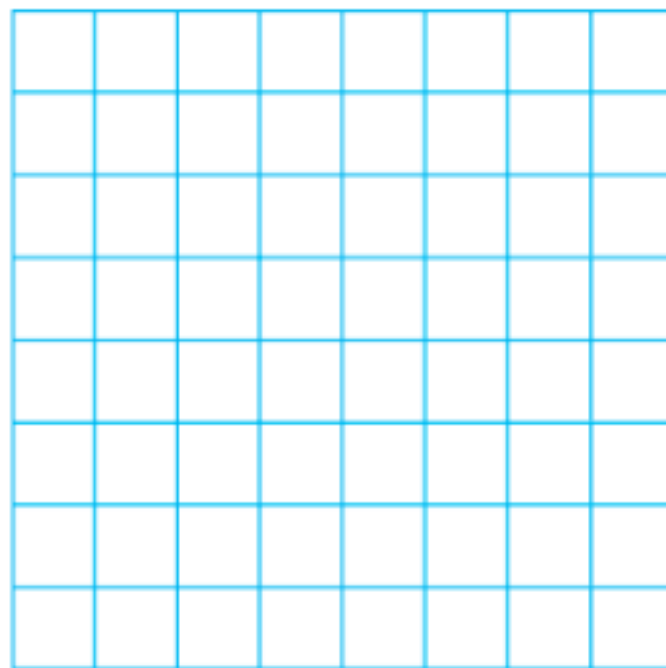
A pentagon can not have three acute angles.



All regular shapes, with more than four sides, only have obtuse angles.



A triangle only has acute angles.



Friday- To solve problems based on angles.



To Start

Can you complete the magic squares? Each row and column must add up to a certain total.
So should each diagonal too!



			1
	11		14
3	10		
	5	9	4

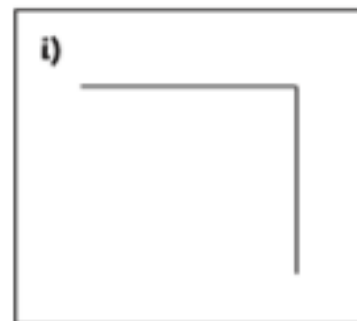
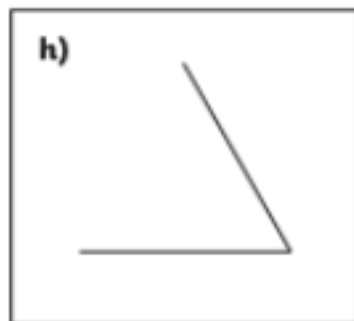
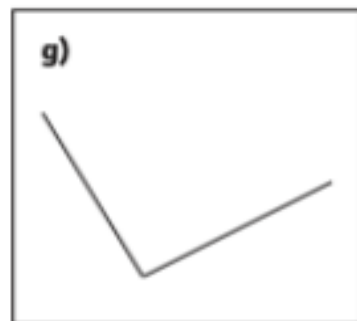
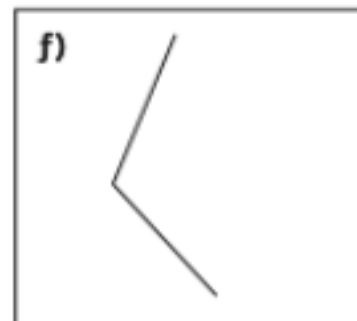
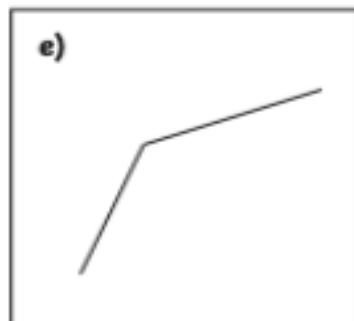
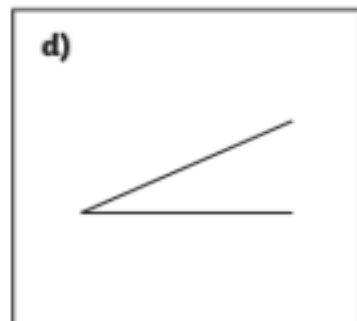
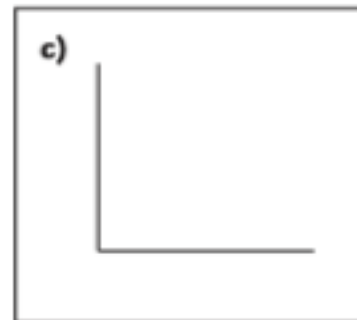
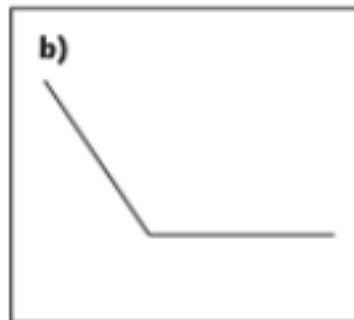
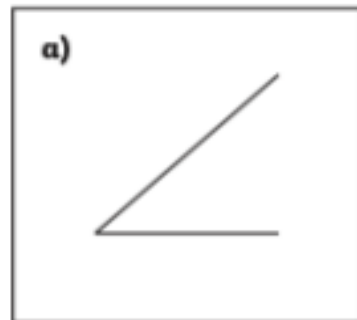
48			
	30	33	24
			36
	45	42	3



Angle Sort

Use a letter to label each angle:

A = acute
R = right angle
O = obtuse



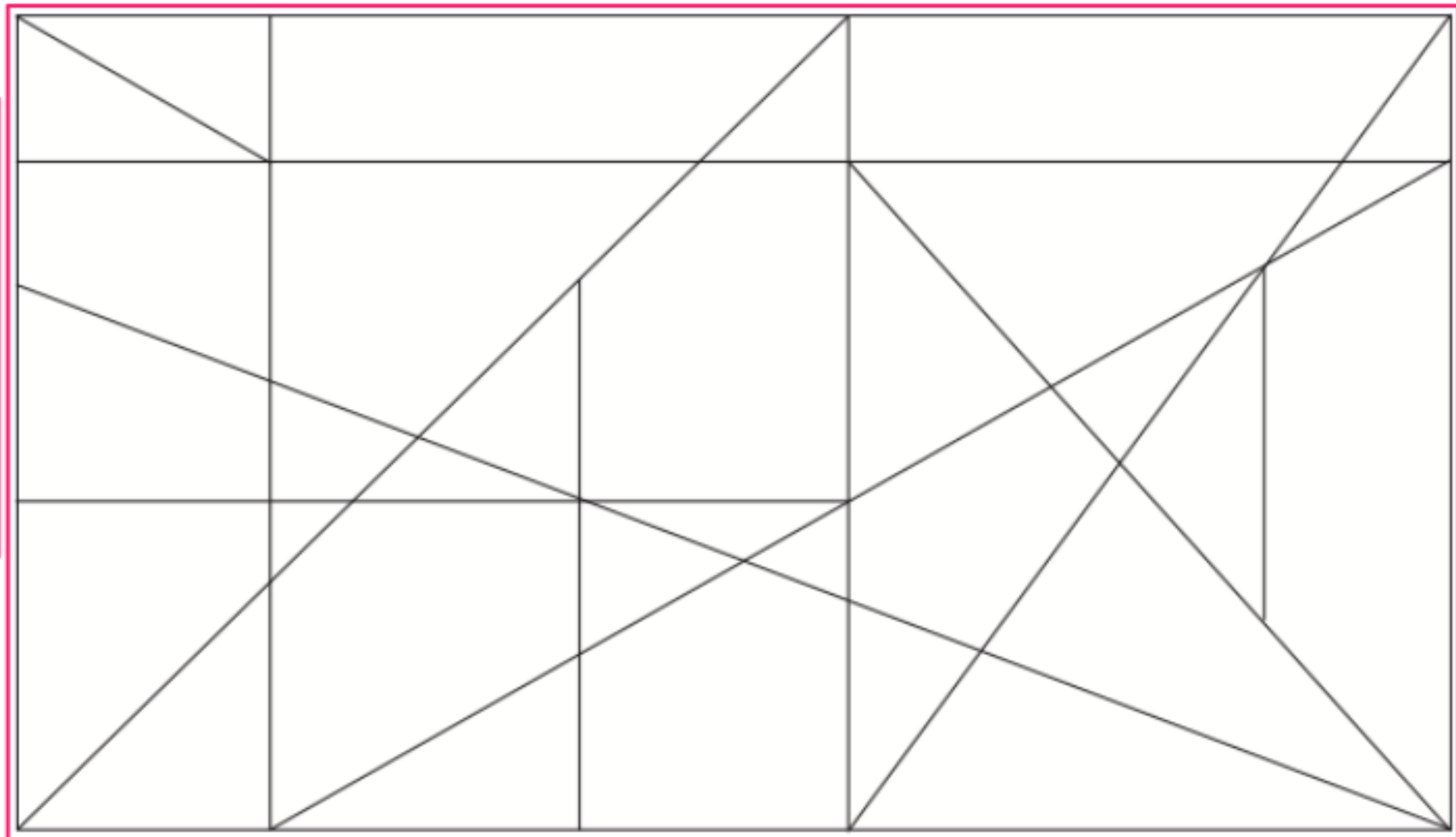
Spot the angle

Use a letter to label
each angle:

A = acute

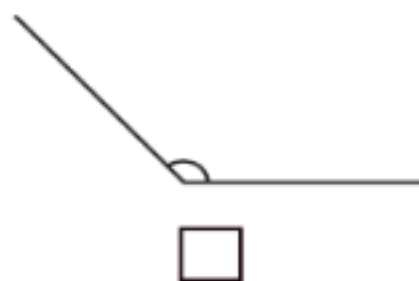
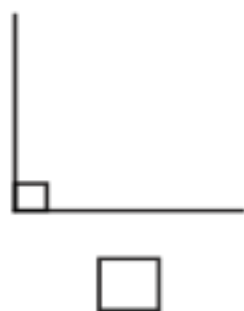
R = right angle

O = obtuse



Angle Quiz

Order these angles from smallest to largest by labelling them from 1 (smallest) -4 (largest)



Which of these shapes is the odd one out based on its angles? Explain your answer:





Angle Quiz

Look at the shape I have drawn and use $<$ and $>$ symbols to make the statements correct.

Angle A ☐ angle D

Angle B ☐ angle D

Angle C ☐ angle D

Angle A ☐ angle B

