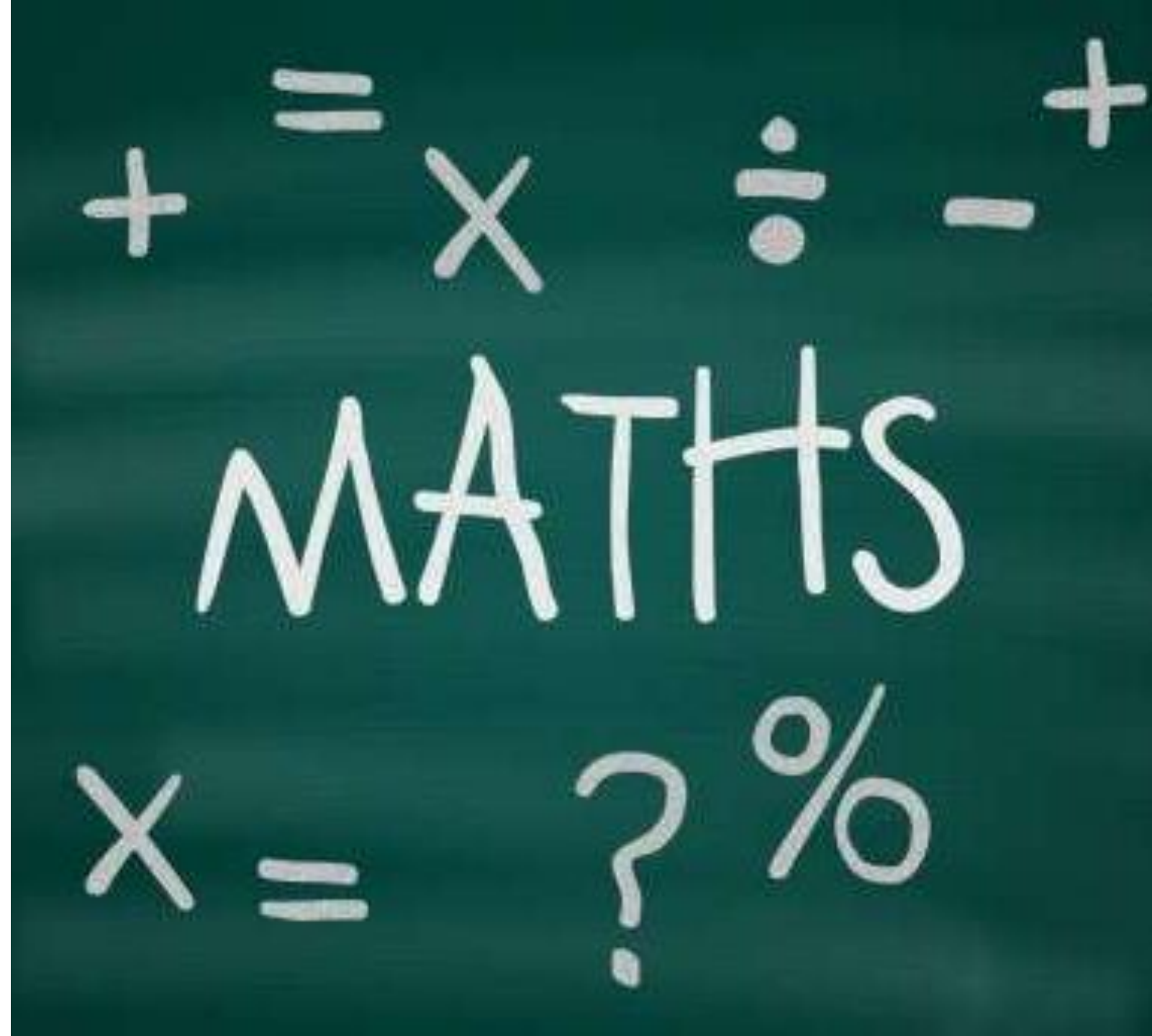


# Maths Week Commencing 6<sup>th</sup> July

- Lesson 1 – Identify Angles
- Lesson 2 – Compare and Order Angles
- Lesson 3 – Triangles
- Lesson 4 – Quadrilaterals
- Lesson 5- Friday Challenge



# Lesson 1 – Identify Angles

1. Watch the video clip for today's teaching.

<https://whiterosemaths.com/homelearning/year-4/>

2. Complete the questions on the next few pages.

**Optional extra learning:** BBC Bitesize Daily activities

<https://www.bbc.co.uk/bitesize/dailylessons>

1 Complete the sentences.

Use the word bank to help you.

90

180

greater

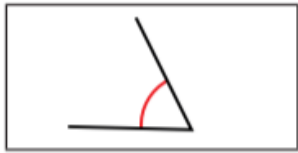
less

a) A right angle is  degrees.

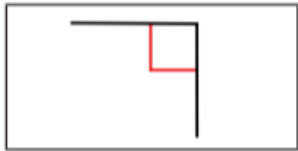
b) An acute angle is \_\_\_\_\_ than  degrees.

c) An obtuse angle is \_\_\_\_\_ than  degrees  
but less than  degrees.

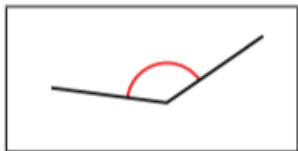
2 Match the angles to the labels.



right angle

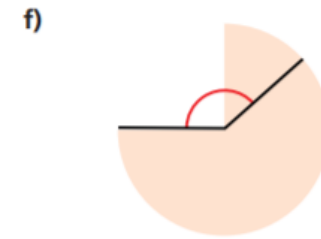
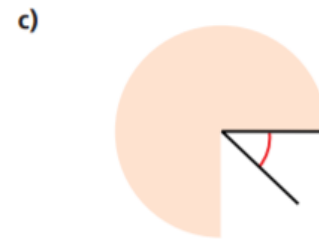
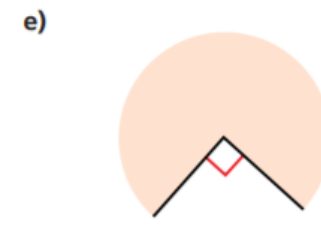
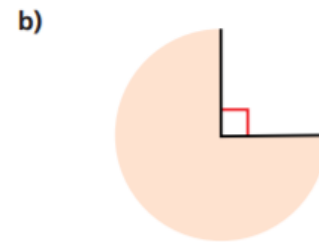
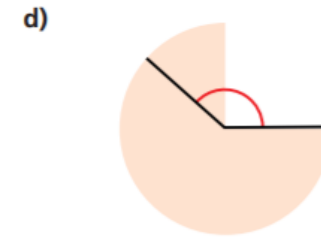
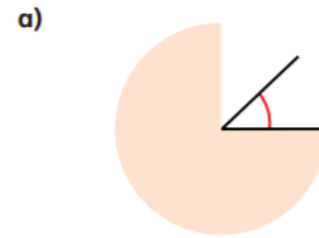


acute angle

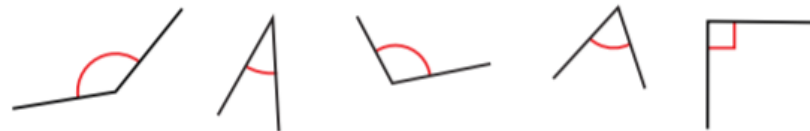


obtuse angle

3 Label the angles: acute, obtuse or right angle.



4 Tick all the acute angles.



5 Tick all the obtuse angles.



6 Label the angles: acute, obtuse or right angle.

a)



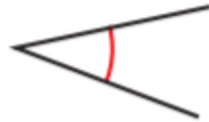
\_\_\_\_\_

b)



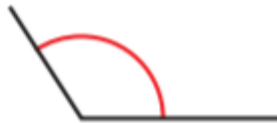
\_\_\_\_\_

c)



\_\_\_\_\_

d)



\_\_\_\_\_

7 Is the angle acute, obtuse or a right angle?

a)  $35^\circ$  \_\_\_\_\_

d)  $89^\circ$  \_\_\_\_\_

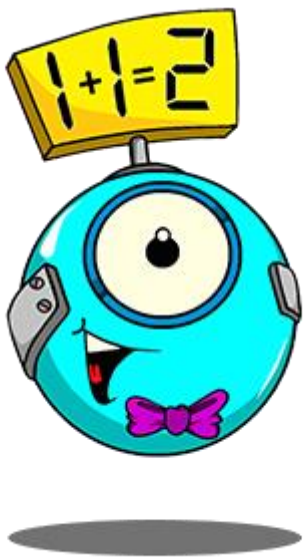
b)  $99^\circ$  \_\_\_\_\_

e)  $121^\circ$  \_\_\_\_\_

c)  $90^\circ$  \_\_\_\_\_

f)  $179^\circ$  \_\_\_\_\_

How do you know?



## Challenge Question:



Angle B is obtuse because it's bigger than the right angle.

A



B



Do you agree with Teddy? \_\_\_\_\_

Explain your answer.

# Answers:

1 Complete the sentences.

Use the word bank to help you.

90

180

greater

less

a) A right angle is  degrees.

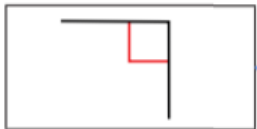
b) An acute angle is less than  degrees.

c) An obtuse angle is greater than  degrees but less than  degrees.

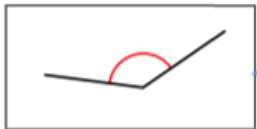
2 Match the angles to the labels.



right angle

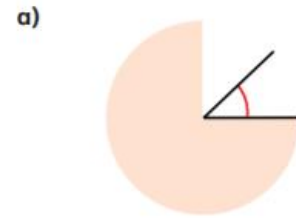


acute angle

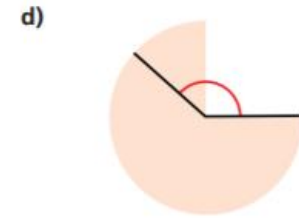


obtuse angle

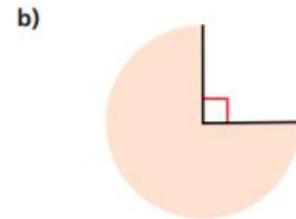
3 Label the angles: acute, obtuse or right angle.



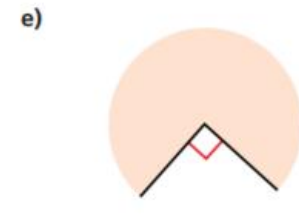
acute



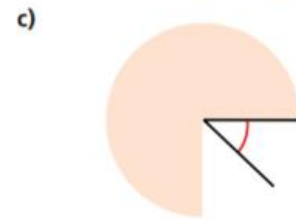
obtuse



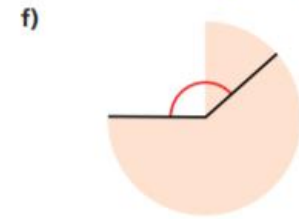
right angle



right angle

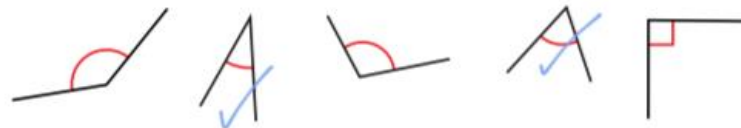


acute



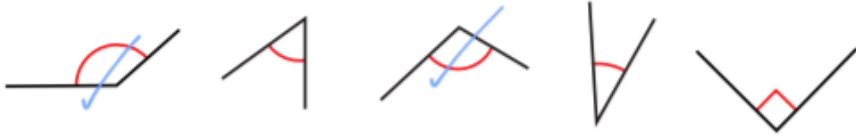
obtuse

4 Tick all the acute angles.

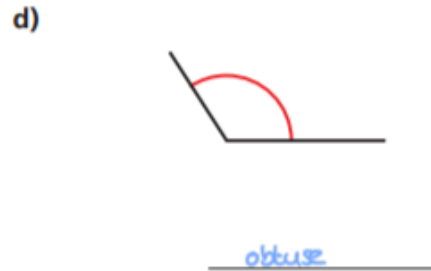
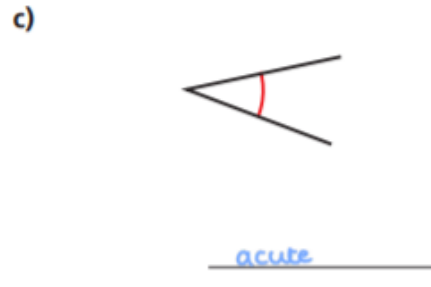
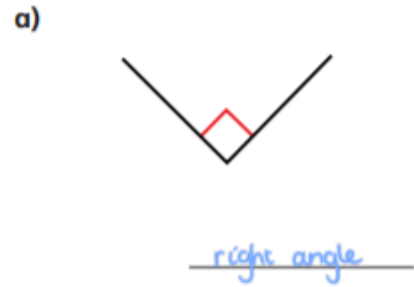


# Answers:

5 Tick all the obtuse angles.



6 Label the angles: acute, obtuse or right angle.



7 Is the angle acute, obtuse or a right angle?

a)  $35^\circ$  acute

d)  $89^\circ$  acute

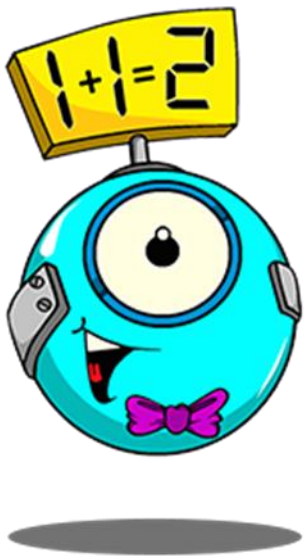
b)  $99^\circ$  obtuse

e)  $121^\circ$  obtuse

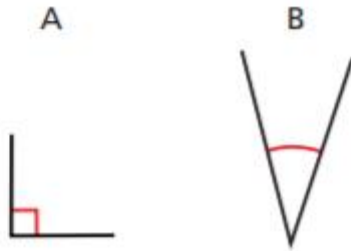
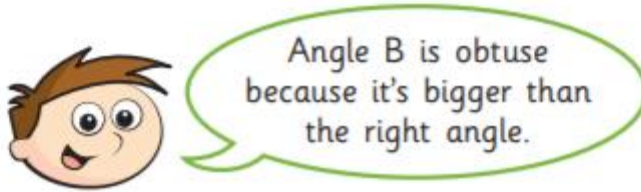
c)  $90^\circ$  right angle

f)  $179^\circ$  obtuse

How do you know?



## Challenge Question Answer:



Do you agree with Teddy? No

Explain your answer.



## Lesson 2 – Compare and Order Angles

1. Watch the video clip for today's teaching.

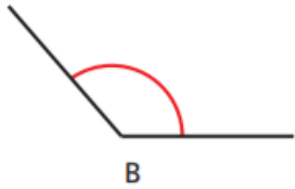
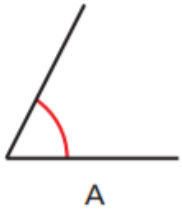
<https://whiterosemaths.com/homelearning/year-4/>

2. Complete the questions on the next few pages.

**Optional extra learning:** BBC Bitesize Daily activities

<https://www.bbc.co.uk/bitesize/dailylessons>

1 Here are two angles.



a) Which angle is obtuse? \_\_\_\_\_

b) Which angle is acute? \_\_\_\_\_

How do you know?

2 Here are two angles.



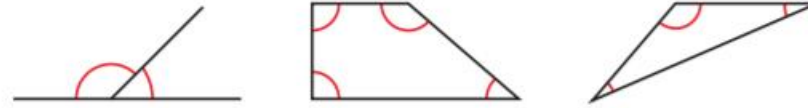
a) What type of angle is angle X? \_\_\_\_\_

b) What type of angle is angle Y? \_\_\_\_\_

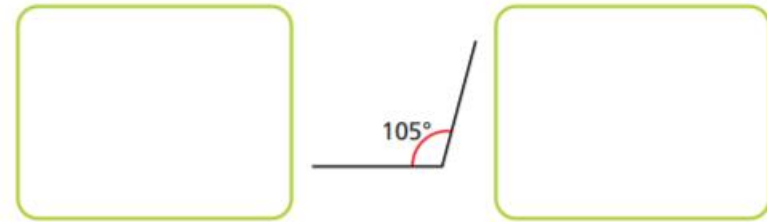
c) Which angle is smaller? \_\_\_\_\_

How do you know?

3 Circle the greatest angle in each diagram.



4 Here is an angle.



a) Draw a smaller angle than  $105^\circ$  in the box on the left.

b) Draw a greater angle than  $105^\circ$  in the box on the right.

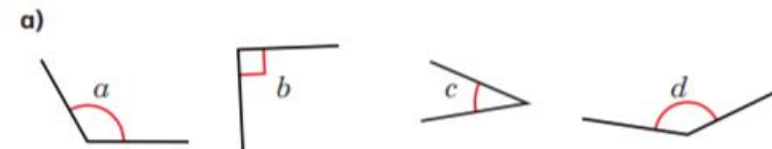
c) Is this statement true or false?

The angles are in ascending order of size.

\_\_\_\_\_

Explain your answer.

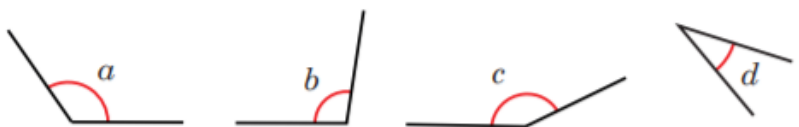
5 Order the angles from greatest to smallest.



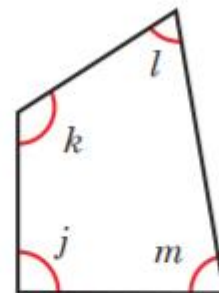
b)



c)



7 Four angles are labelled in the quadrilateral.



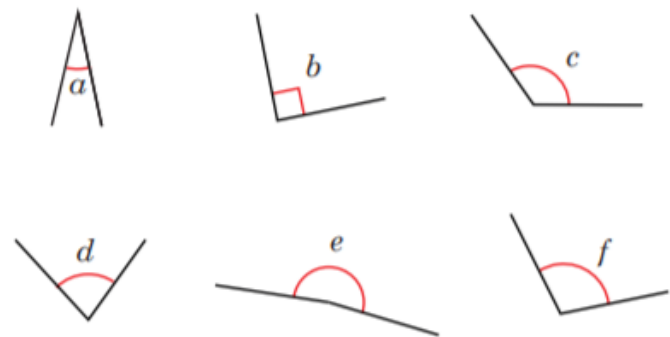
a) Which of the angles are acute angles? \_\_\_\_\_

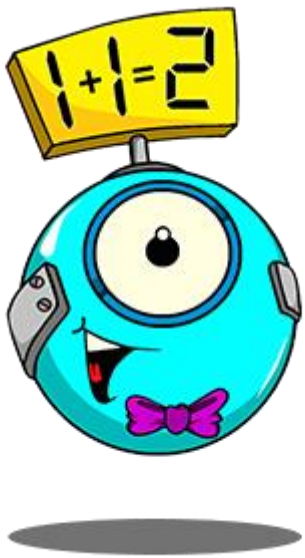
b) Which of the angles are obtuse angles? \_\_\_\_\_

c) Write the angles in order of size, starting with the smallest.

\_\_\_\_\_

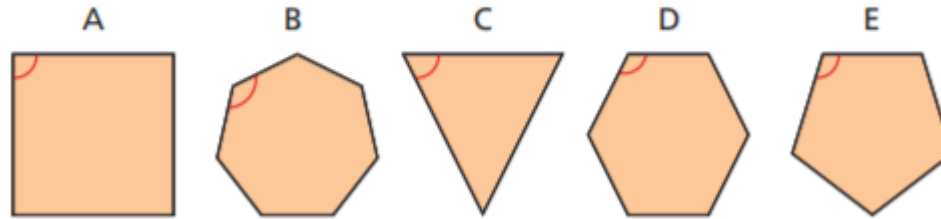
6 Compare and order the angles from smallest to greatest.





## Challenge Question:

| An interior angle is marked in each polygon.



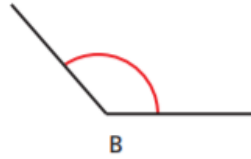
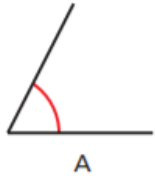
Order the interior angles of the polygons from smallest to greatest.

---

What do you notice about the number of sides a polygon has and the size of its interior angle?

# Answers

1 Here are two angles.



a) Which angle is obtuse?

B

b) Which angle is acute?

A

How do you know?

2 Here are two angles.



a) What type of angle is angle X?

obtuse

b) What type of angle is angle Y?

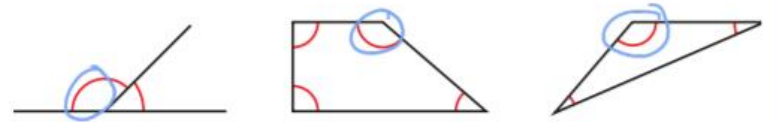
acute

c) Which angle is smaller?

Y

How do you know?

3 Circle the greatest angle in each diagram.



4 Here is an angle.



a) Draw a smaller angle than  $105^\circ$  in the box on the left.

b) Draw a greater angle than  $105^\circ$  in the box on the right.

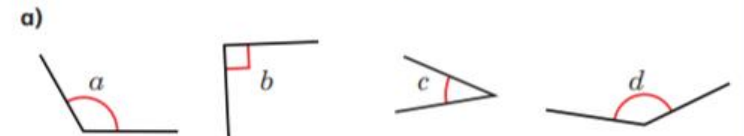
c) Is this statement true or false?

The angles are in ascending order of size.

true

Explain your answer.

5 Order the angles from greatest to smallest.



d a b c

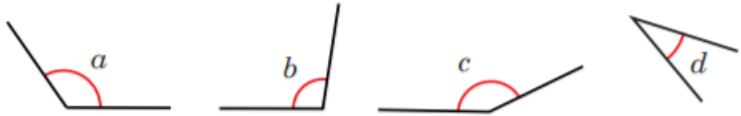
# Answers

b)



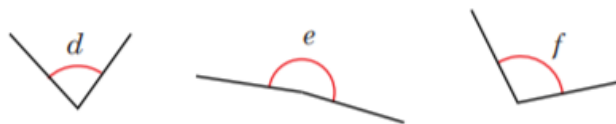
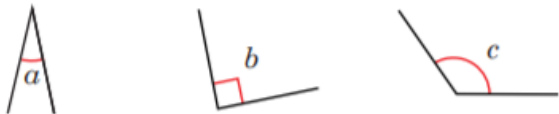
d b a c

c)



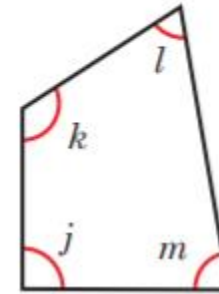
c a b d

6 Compare and order the angles from smallest to greatest.



a d b f c e

7 Four angles are labelled in the quadrilateral.



a) Which of the angles are acute angles?

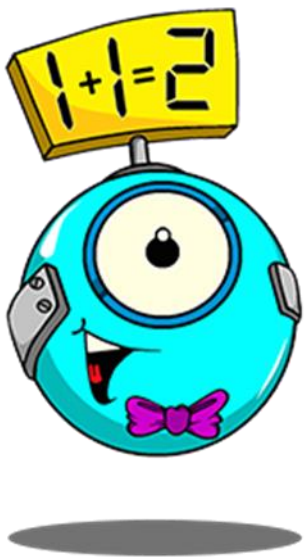
l m

b) Which of the angles are obtuse angles?

k

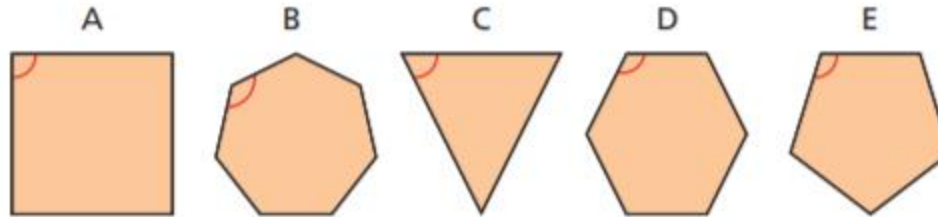
c) Write the angles in order of size, starting with the smallest.

l m j k



# Challenge Question Answer:

An interior angle is marked in each polygon.



Order the interior angles of the polygons from smallest to greatest.

C A E D B

What do you notice about the number of sides a polygon has and the size of its interior angle?

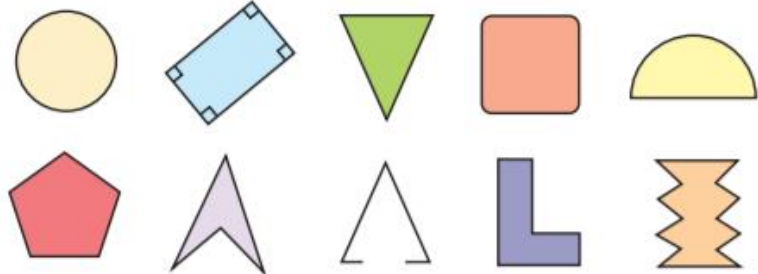
# Lesson 3 – Triangles

1. Watch the video clip for today's teaching.  
<https://whiterosemaths.com/homelearning/year-4/>
2. Complete the questions on the next few pages.

**Optional extra learning:** BBC Bitesize Daily activities  
<https://www.bbc.co.uk/bitesize/dailylessons>



1 Here are some shapes.



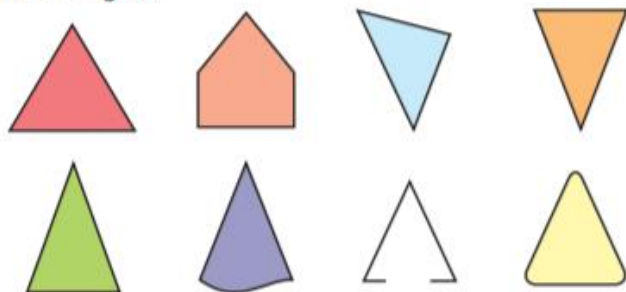
- a) Tick the polygons.
- b) Talk to a partner about the shapes you have not ticked.  
Why are they not polygons?
- c) Write a definition of a polygon.

---

---

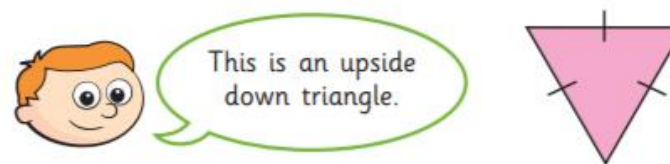
Compare your definition with a partner's.

2 Tick the triangles.



For any shapes you have not ticked, talk to a partner about why somebody might think they are triangles.

3 Ron is classifying triangles.



a) Ron is incorrect.

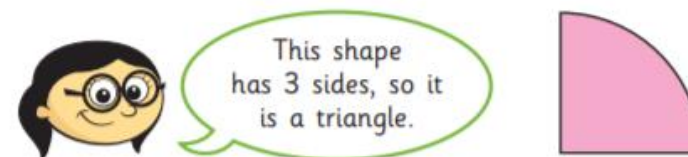
Explain why.

---

---

b) What type of triangle is it? \_\_\_\_\_

4 Annie is identifying shapes.



Do you agree with Annie? \_\_\_\_\_

Explain your answer.

---

---

5 Match the type of triangle to the definition.

scalene

2 sides and  
2 angles equal

equilateral

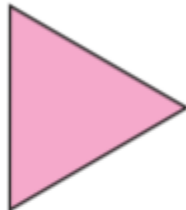




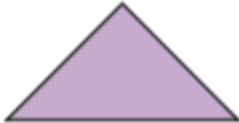
no sides or  
angles equal

isosceles

all sides and  
all angles equal

6 Label each triangle as either equilateral, isosceles or scalene.

You will need to measure the side lengths.

A 	B 	C 
_____	_____	_____
D 	E 	F 
_____	_____	_____

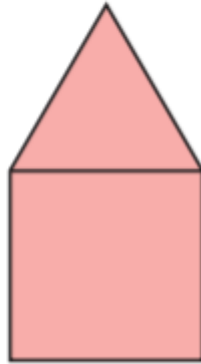


## Challenge Question:

The diagram shows an equilateral triangle and a square.

The perimeter of the square is 100 cm.

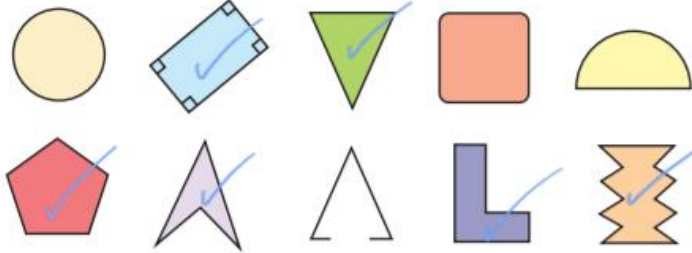
Work out the perimeter of the compound shape.



perimeter =  cm

# Answers

1 Here are some shapes.

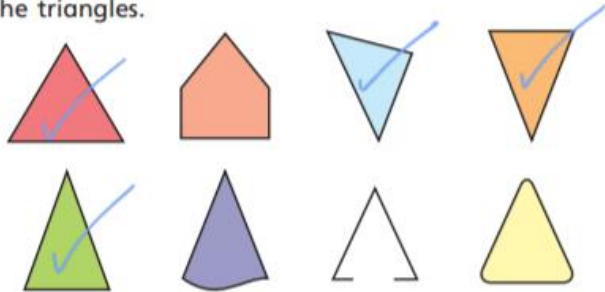


- a) Tick the polygons.  
b) Talk to a partner about the shapes you have not ticked.  
Why are they not polygons?  
c) Write a definition of a polygon.

A closed shape made up of straight sides

Compare your definition with a partner's.

2 Tick the triangles.



For any shapes you have not ticked, talk to a partner about why somebody might think they are triangles.

3 Ron is classifying triangles.



This is an upside down triangle.



a) Ron is incorrect.

Explain why.

A triangle cannot be upside down.

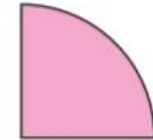
b) What type of triangle is it?

equilateral

4 Annie is identifying shapes.



This shape has 3 sides, so it is a triangle.



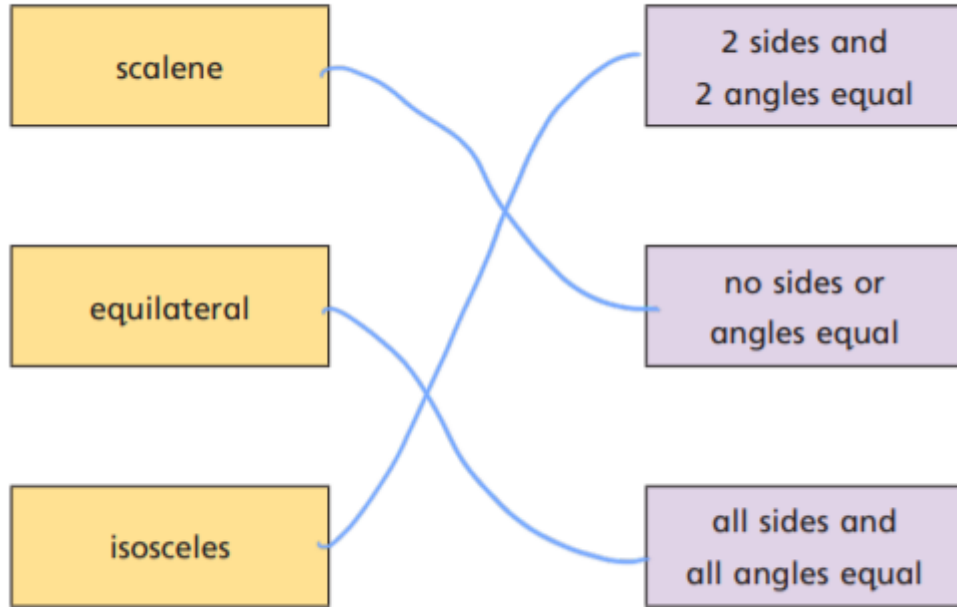
Do you agree with Annie? No

Explain your answer.

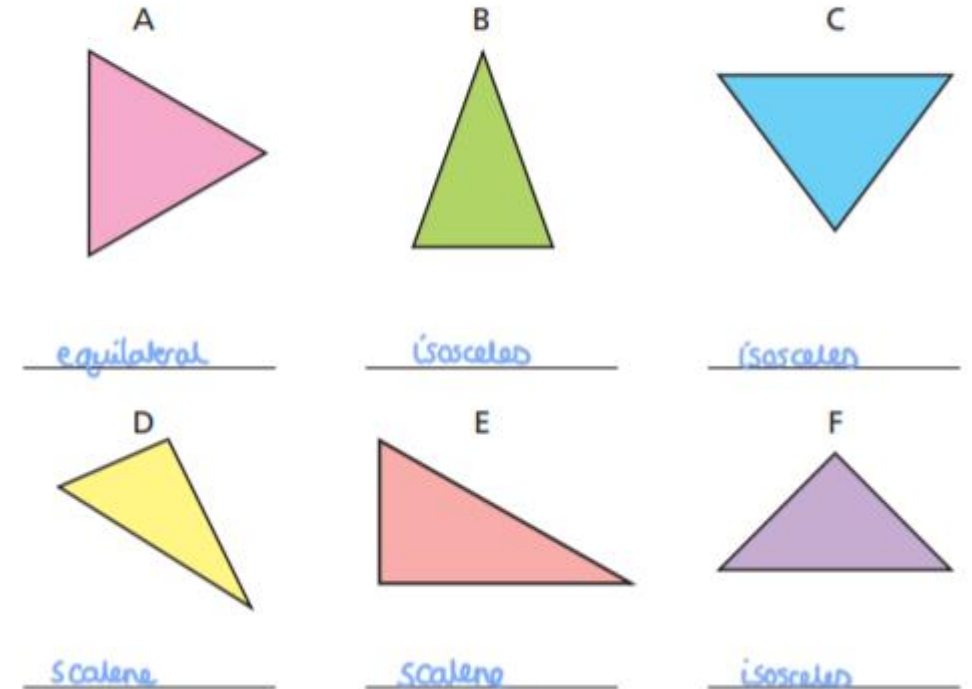
A triangle has three straight sides this shape does not.

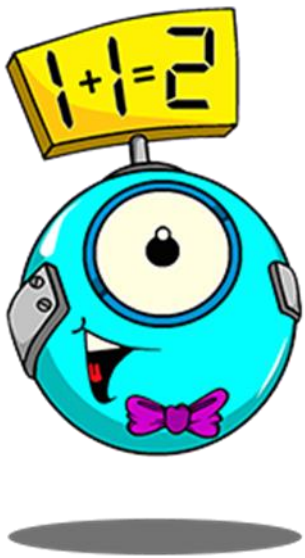
# Answers

5 Match the type of triangle to the definition.



6 Label each triangle as either equilateral, isosceles or scalene. You will need to measure the side lengths.



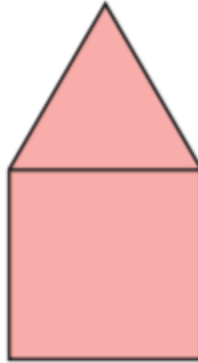


# Challenge Question Answer:

The diagram shows an equilateral triangle and a square.

The perimeter of the square is 100 cm.

Work out the perimeter of the compound shape.



perimeter =  cm

## Lesson 4 – Quadrilaterals

1. Watch the video clip for today's teaching.

<https://whiterosemaths.com/homelearning/year-4/>

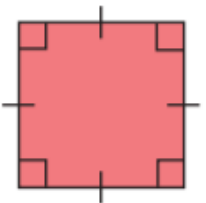
2. Complete the questions on the next few pages.


**Optional extra learning:** BBC Bitesize Daily activities

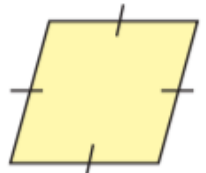
<https://www.bbc.co.uk/bitesize/dailylessons>

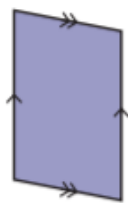
1 Use the word bank to label each quadrilateral.

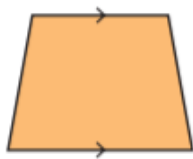
- rhombus
- parallelogram
- trapezium
- rectangle
- square

a)  \_\_\_\_\_

b)  \_\_\_\_\_

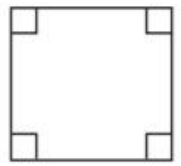
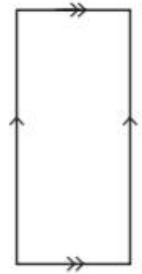
c)  \_\_\_\_\_

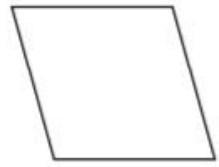
d)  \_\_\_\_\_



e)  \_\_\_\_\_

How did you know which shape was which?

2 Here are some quadrilaterals.

A  B 


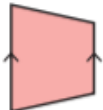




C 

D  E 

- a) Mark any right angles on the shapes.  
One shape has been done for you.
- b) Mark any pairs of parallel lines.  
One shape has been done for you.
- c) Which shapes do not have any right angles?  
\_\_\_\_\_
- d) Which shapes have two pairs of parallel lines?  
\_\_\_\_\_  
\_\_\_\_\_
- e) Which shapes have four equal sides?  
\_\_\_\_\_



3 Complete the table.

Shape	Polygon?	Number of sides	Number of right angles	Number of pairs of parallel sides	Number of equal sides
	Yes	4	4	2	2 pairs
					2
					
					
					
					

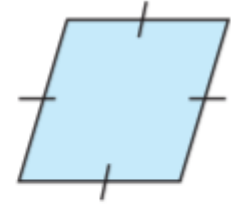
What is the same about all of the shapes?

What is different?

4

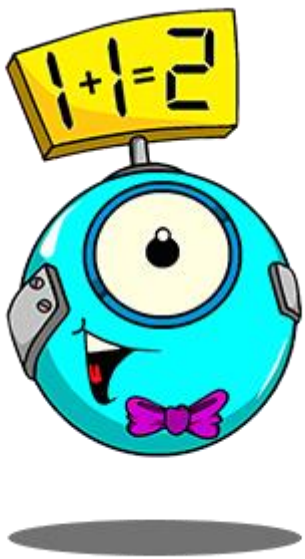


This is a square because it has got 4 equal sides.



Do you agree with Rosie? \_\_\_\_\_

Explain your answer.



## Challenge Question:

Complete this Frayer Model to describe a quadrilateral.

My definition	Key characteristics
Example	Non-example

Quadrilateral

# Answers

1 Use the word bank to label each quadrilateral.

rhombus

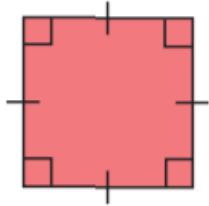
parallelogram

trapezium

rectangle

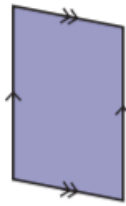
square

a)



square

d)



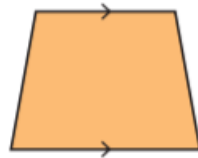
parallelogram

b)



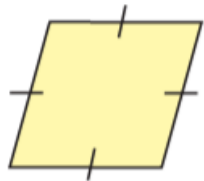
rectangle

e)



trapezium

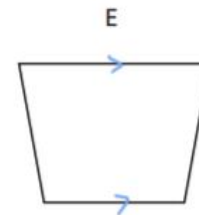
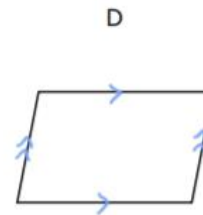
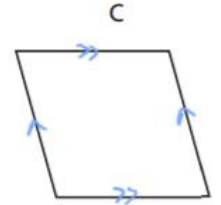
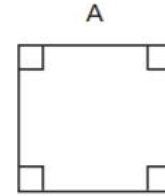
c)



rhombus

How did you know which shape was which?

2 Here are some quadrilaterals.



a) Mark any right angles on the shapes.  
One shape has been done for you.

b) Mark any pairs of parallel lines.  
One shape has been done for you.

c) Which shapes do not have any right angles?

C D E

d) Which shapes have two pairs of parallel lines?

B C D

e) Which shapes have four equal sides?

A C

# Answers

3 Complete the table.

Shape	Polygon?	Number of sides	Number of right angles	Number of pairs of parallel sides	Number of equal sides
	Yes	4	4	2	2 pairs
	Yes	4	0	1	2
	Yes	4	0	2	2 pairs
	Yes	4	4	2	4
	Yes	4	0	2	4
	Yes	4	0	1	0

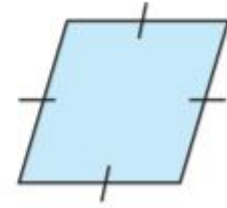
What is the same about all of the shapes?

What is different?

4

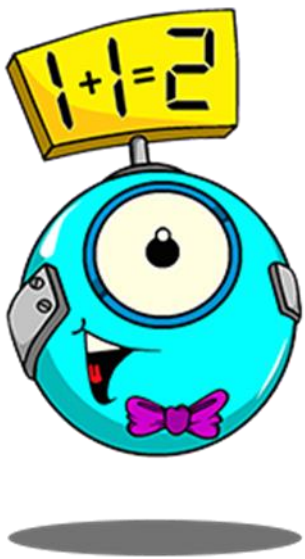


This is a square because it has got 4 equal sides.





Do you agree with Rosie? No

Explain your answer.



# Challenge Question Answer:

Complete this Frayer Model to describe a quadrilateral.

<p>My definition</p> <p>A closed shape with four straight sides.</p>	<p>Key characteristics</p> <p>closed shape 4 straight sides 4 vertices</p>
<p>Quadrilateral</p>	
<p>Example</p> 	<p>Non-example</p> 

# Its Friday!

**Can you complete the Friday Maths Challenge?**

<https://whiterosemaths.com/homelearning/year-4/>

*Best of luck!*

# Year 4

