

# Year 3

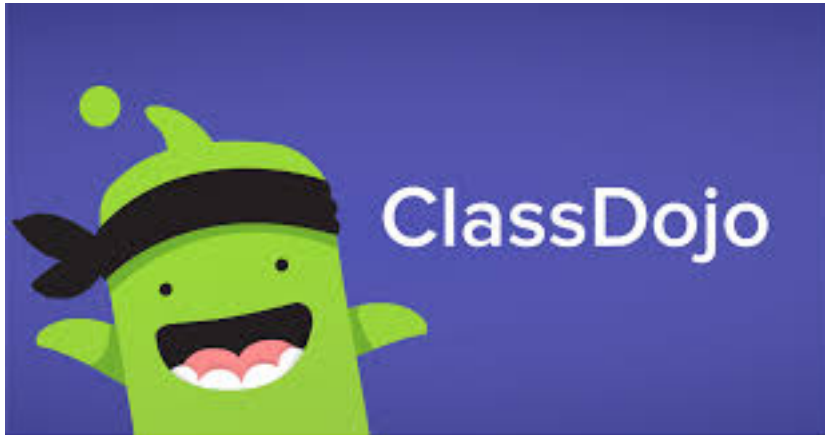
# Maths Lesson

4.02.21

Home Learning Powerpoint – If you have any problems, just send us a Dojo message.

# On this maths powerpoint:

- 1 warm up activity
- Answers from yesterday
- 1 maths lesson



Remember – you can get Dojos for posting pictures of your work on Class Dojo!



# Warm Up Activity 4.



Answers on  
the next slide  
so no  
peeking!

Recall some of your fractions work from last week.  
Remember to divide by the denominator (bottom number)

## Easier

1.  $\frac{1}{2}$  of 6 =
2.  $\frac{1}{2}$  of 8 =
3.  $\frac{1}{2}$  of 12 =
4.  $\frac{1}{2}$  of 20 =
5.  $\frac{1}{4}$  of 16 =
6.  $\frac{1}{4}$  of 20 =
7.  $\frac{1}{4}$  of 24 =
8.  $\frac{1}{4}$  of 32 =
9.  $\frac{1}{4}$  of 40 =
10.  $\frac{1}{4}$  of 44 =

## Harder

1.  $\frac{1}{2}$  of 10 =
2.  $\frac{1}{2}$  of 14 =
3.  $\frac{1}{2}$  of 18 =
4.  $\frac{1}{4}$  of 16 =
5.  $\frac{1}{10}$  of 20 =
6.  $\frac{1}{5}$  of 35 =
7.  $\frac{1}{6}$  of 42 =
8.  $\frac{2}{10}$  of 30 =
9.  $\frac{3}{10}$  of 50 =
10.  $\frac{3}{4}$  of 12 =



# Warm Up Activity 4

## Answers



Recall some of your fractions work from last week.  
Remember to divide by the denominator (bottom number)

### Easier

1.  $\frac{1}{2}$  of 6 = 3
2.  $\frac{1}{2}$  of 8 = 4
3.  $\frac{1}{2}$  of 12 = 6
4.  $\frac{1}{2}$  of 20 = 10
5.  $\frac{1}{4}$  of 16 = 4
6.  $\frac{1}{4}$  of 20 = 5
7.  $\frac{1}{4}$  of 24 = 6
8.  $\frac{1}{4}$  of 32 = 8
9.  $\frac{1}{4}$  of 40 = 10
10.  $\frac{1}{4}$  of 44 = 11

### Harder

1.  $\frac{1}{2}$  of 10 = 5
2.  $\frac{1}{2}$  of 14 = 7
3.  $\frac{1}{2}$  of 18 = 9
4.  $\frac{1}{4}$  of 16 = 4
5.  $\frac{1}{10}$  of 20 = 2
6.  $\frac{1}{5}$  of 35 = 7
7.  $\frac{1}{6}$  of 42 = 7
8.  $\frac{2}{10}$  of 30 = 6
9.  $\frac{3}{10}$  of 50 = 15
10.  $\frac{3}{4}$  of 12 = 9



4.02.21






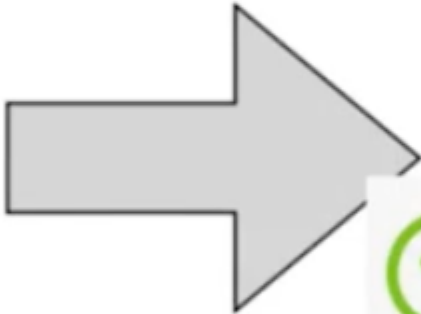



Write today's  
date and  
objective in your  
home learning  
book.

Can I understand the terms acute and  
obtuse angles?

Remember to be  
proud of your work  
and use your best  
presentation

Take a look at how you got on with your work yesterday.

**Part A Decide which of these shapes have rights angles**

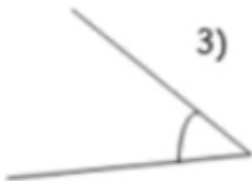
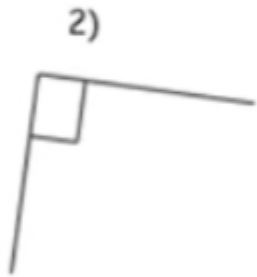
1) 	2)  	3)  
4)  	5) 	6) 

**Challenge - Which do you think has the most right angles?**

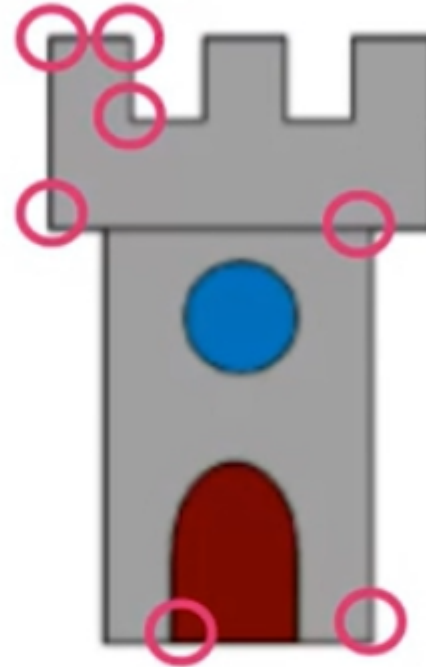


## Part B

1. Find the right angle below



2. Circle all the right angles created in this picture



There are lots more to find in this picture

Challenge - draw shapes that have 1, 2, and 4 right angles



For today's Maths lesson , I would like you to use this video from the Oak Academy website. The teacher will take you through a lesson on identifying acute and obtuse angles. Click on the link below.

<https://classroom.thenational.academy/lessons/to-recognise-right-angles-6ww34d?step=2&activity=video>

You will need to get the equipment shown here



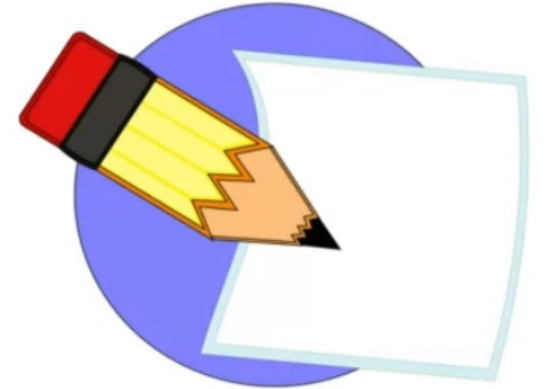
I have also copied a few of the slides to help you on your way.

### Be prepared!

In this lesson, we will be building on your knowledge of right-angles from yesterday to explore angles both greater and smaller than right-angles (obtuse and acute angles).

Today, you will need:

- Pencil
- Paper or exercise book
- Right-angle checker (a corner of a piece of paper)

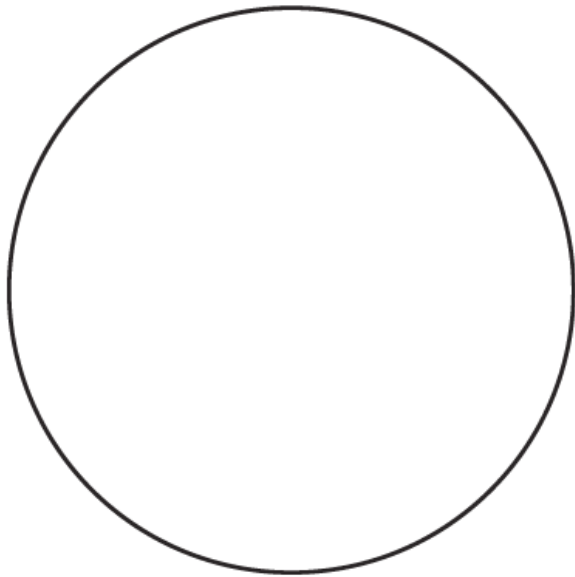


Zoom out (Ctrl+Minus)

# Make a Right Angle Checker

## Instructions

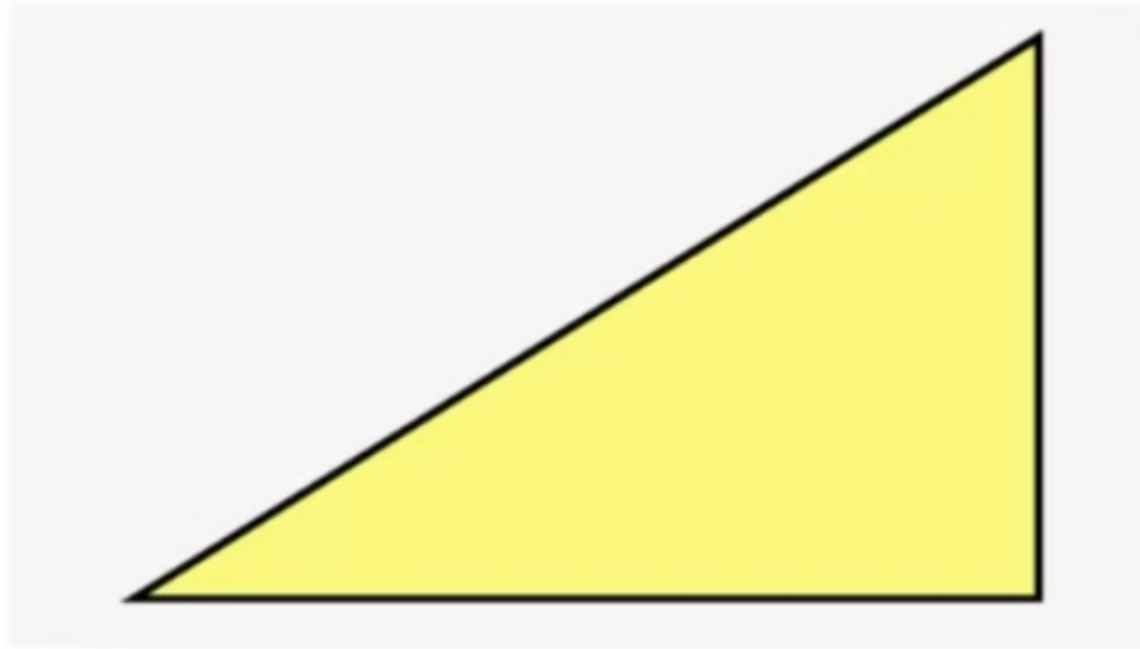
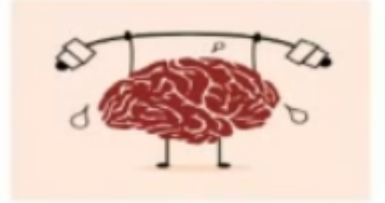
1. Cut out the circle.
2. Fold it in half.
3. Now, fold it in half again.
4. You can now check for right angles!



You can also use this sheet to make your own right angle checker

Warm up!

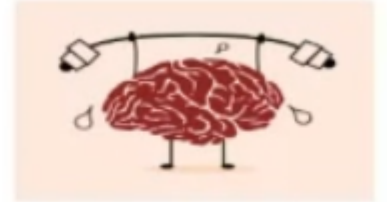
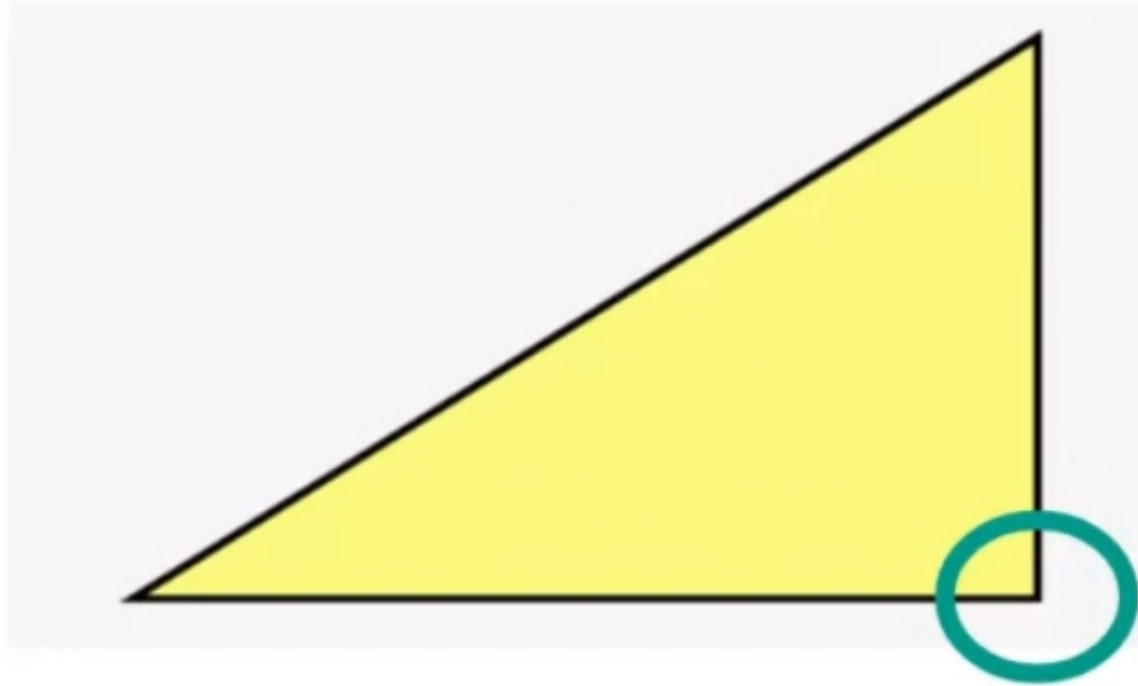
Which of the angles in this shape are right-angles?



How did you get on?

Warm up!

Which of the angles in this shape are right-angles?



## Make sure you understand these star words

### Star Words



right angle



greater

smaller



acute

obtuse





Let's revise

Do right-angles change (become bigger or smaller)  
when they are moved or rotated?



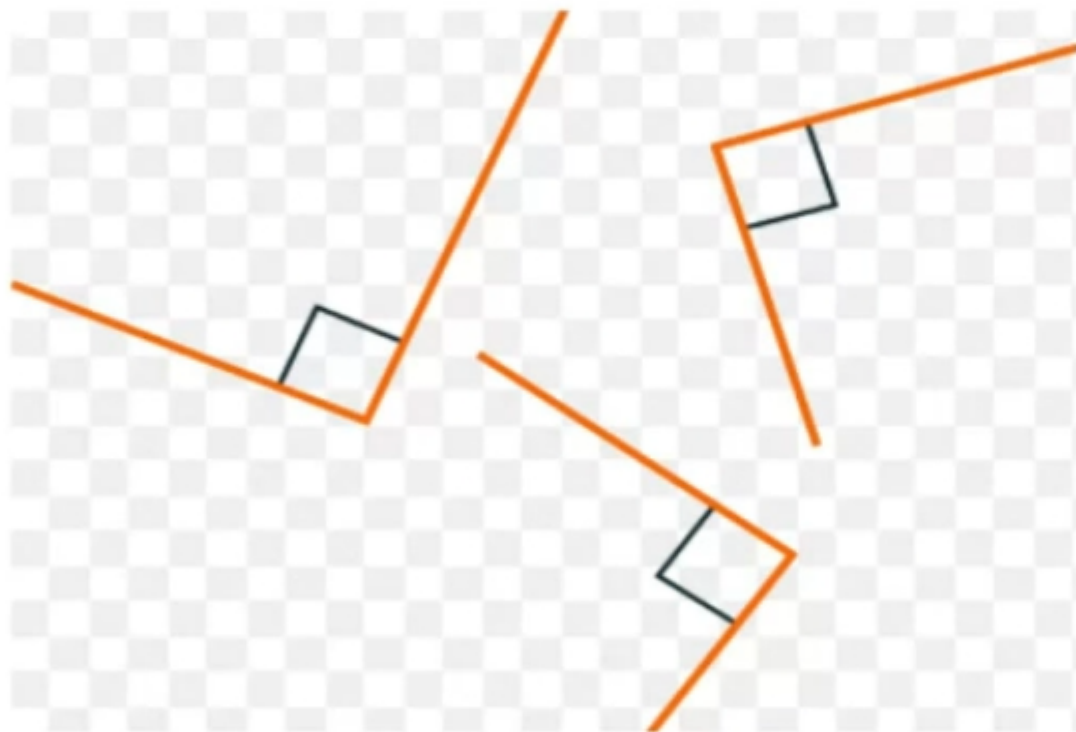
Right angle

Exactly  $90^\circ$



Let's revise

Do right-angles change (become bigger or smaller)  
when they are moved or rotated?

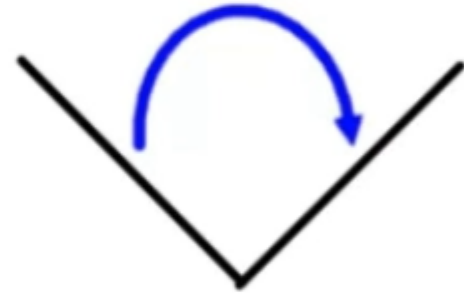
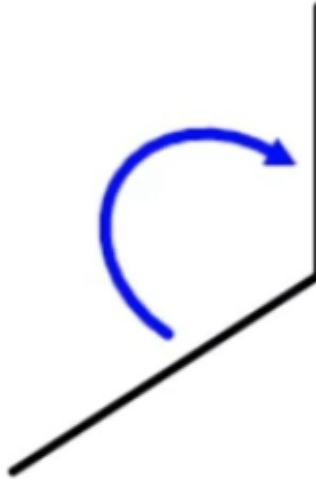
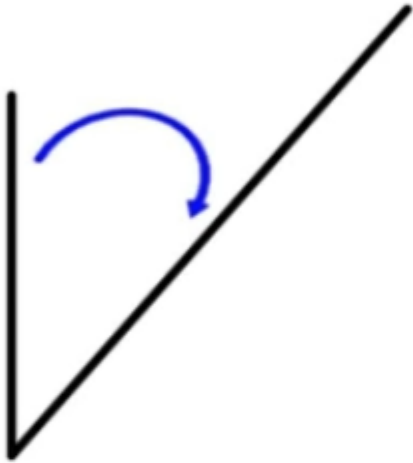


Right angle  
Exactly  $90^\circ$



Let's learn

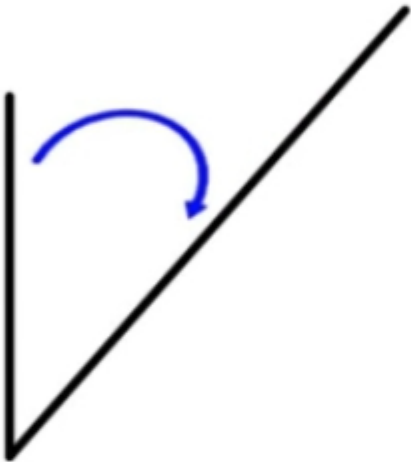
Are these angles greater, smaller or equal to right angles?



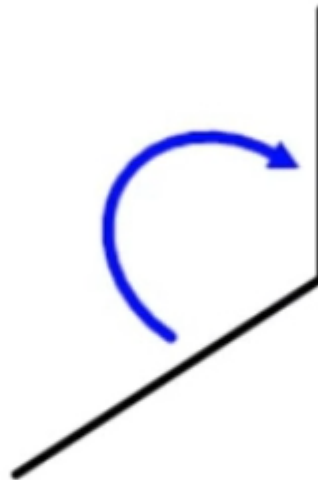
How did you get on?

Let's learn

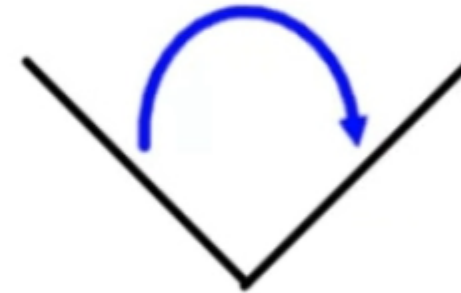
Are these angles greater, smaller or equal to right angles?



smaller



greater



equal to



## These are all acute angles

If angles are smaller than right-angles we call them **acute**

*I know the angle is acute because it is smaller than a right angle.*

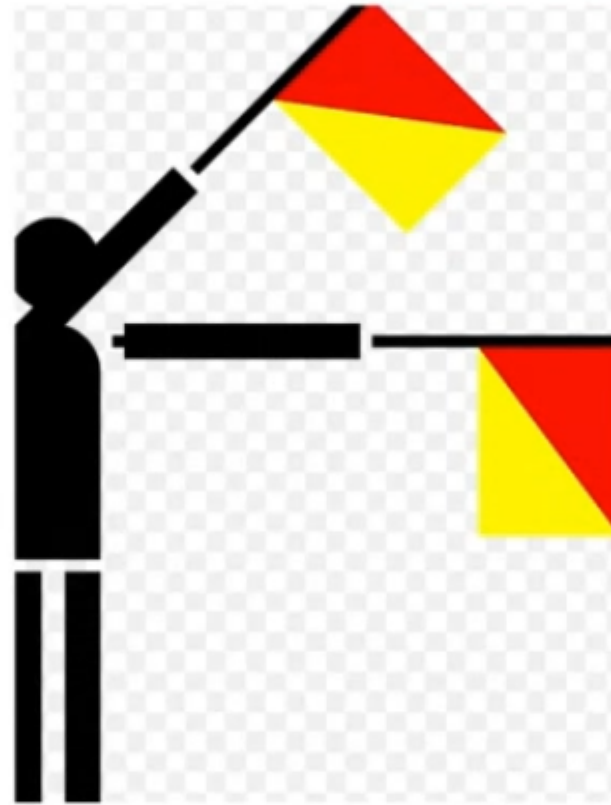
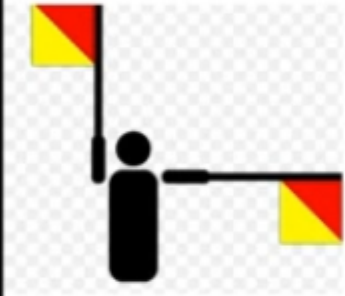


*I know the angle is acute because it is smaller than a right angle.*

Use your right-angle checker -  
if the angle is smaller it must  
be acute



*I know the angle is acute because it is smaller than a right angle.*



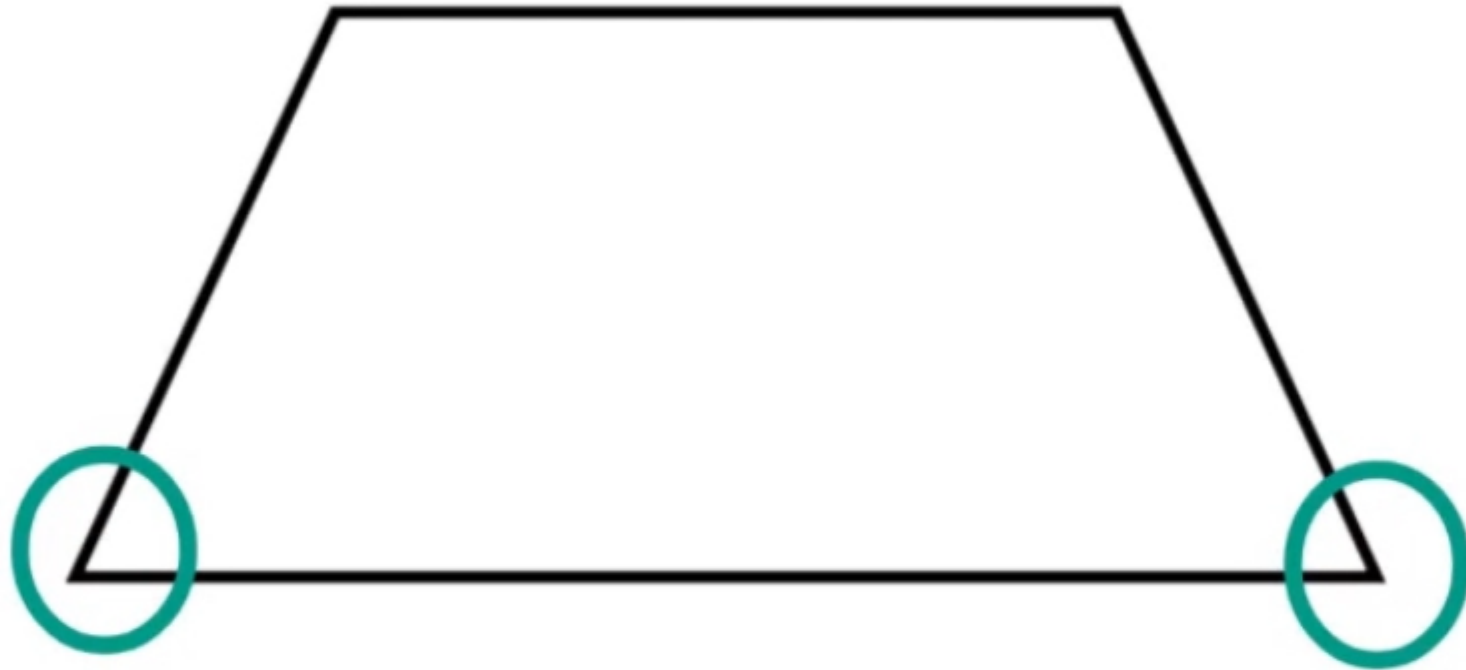
Have a go!

Your turn - find the acute angles in this shape  
(Remember that these are smaller than right-angles)



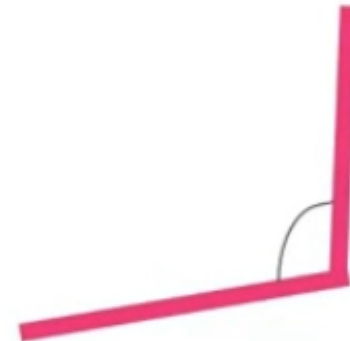
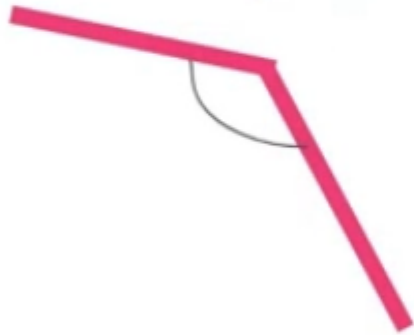


Your turn - find the acute angles in this shape  
(Remember that these are smaller than right-angles)



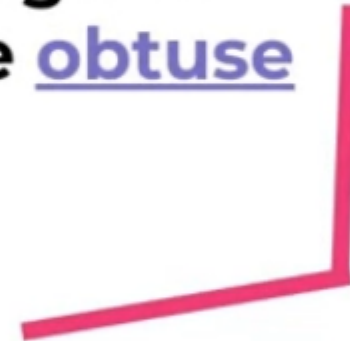
If angles are greater than right-angles we call them obtuse

I know that these angles are obtuse because they are greater than right-angles

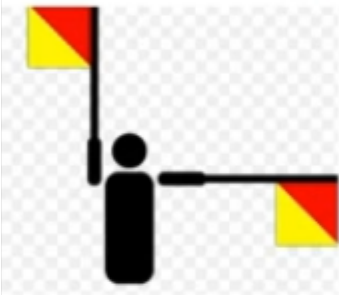


I know that these angles are obtuse because they are greater than right-angles

Use your right-angle checker - if the angle is greater it must be obtuse



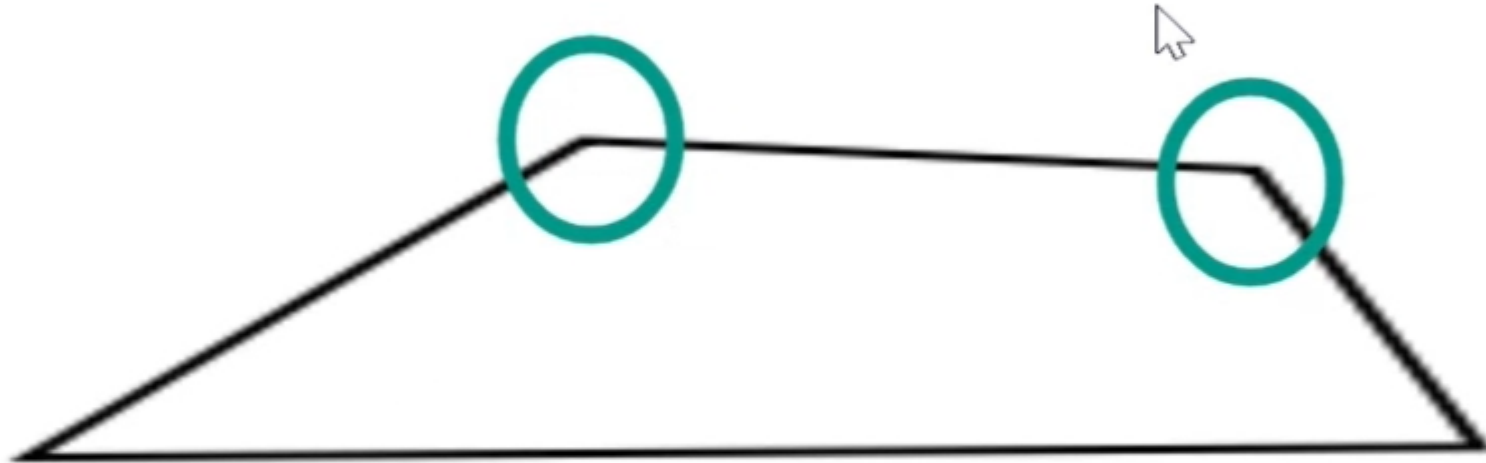
I know that these angles are obtuse because they are greater than right-angles



Your turn - find the obtuse angles in this shape  
(Remember these are greater than right-angles)

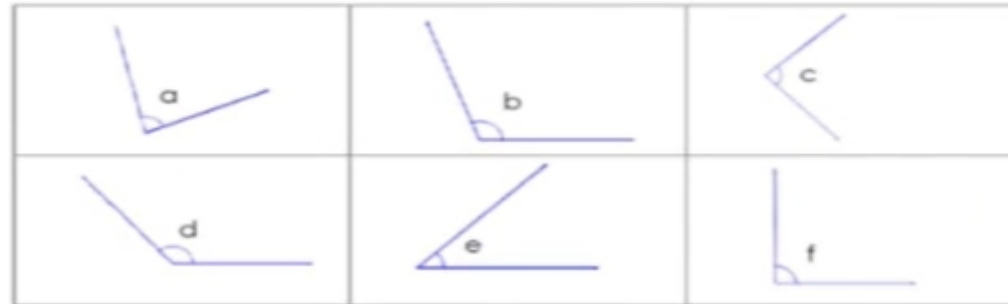


Your turn - find the obtuse angles in this shape  
(Remember these are greater than right-angles)



## Your turn - identify which angles are acute, right-angle or obtuse

Use your piece of folded paper to help you answer the questions.



- a. Which of these angles are smaller than a right angle?
- b. Which of these angles are greater than a right angle?
- b. Which of these angles are equal to a right angle?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Acute**

**obtuse**

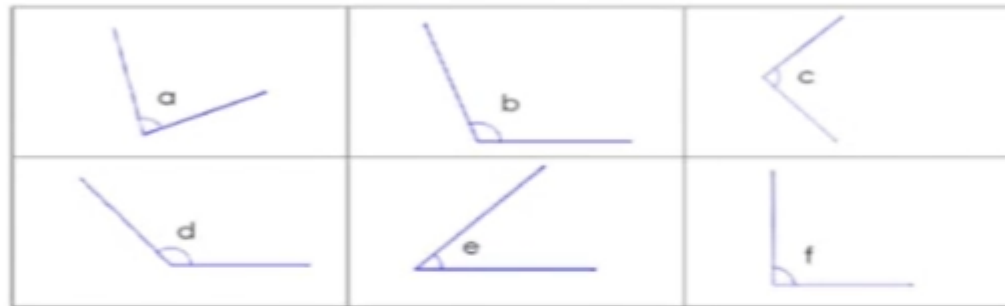
**right-angle**



## How did you get on?

### Your turn - identify which angles are acute, right-angle or obtuse

Use your piece of folded paper to help you answer the questions.



a. Which of these angles are smaller than a right angle?

A E

**Acute**

b. Which of these angles are greater than a right angle?

D B

**obtuse**

b. Which of these angles are equal to a right angle?

C F

**right-angle**





Now complete the sheets on the next two slides. If you can't print them off just have a go in your home learning book. There are a couple of additional sheets from the white rose resources. Tomorrow's lesson will begin by going through the answers.

## Part A

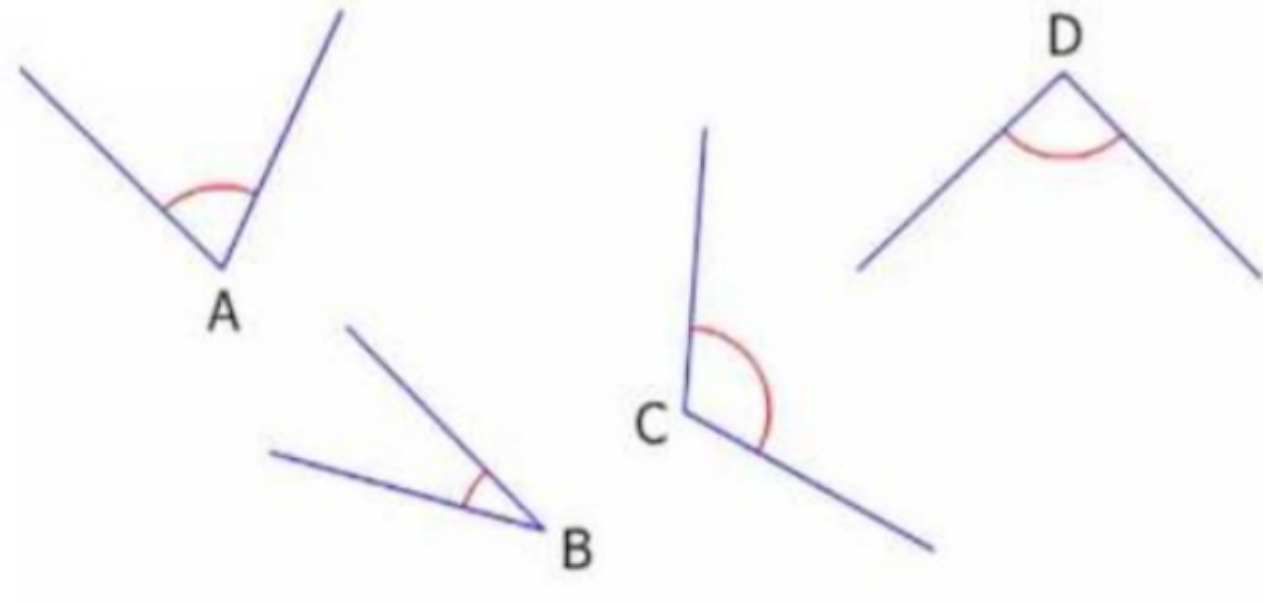
Q1 - Are these angles **acute**, **obtuse** or **right-angle**

A =

B =

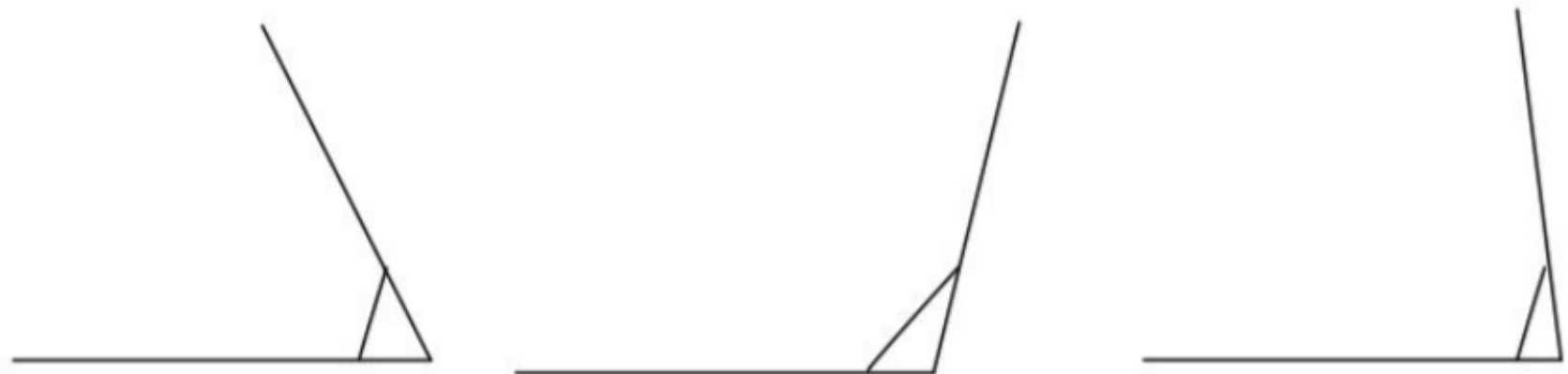
C =

D =



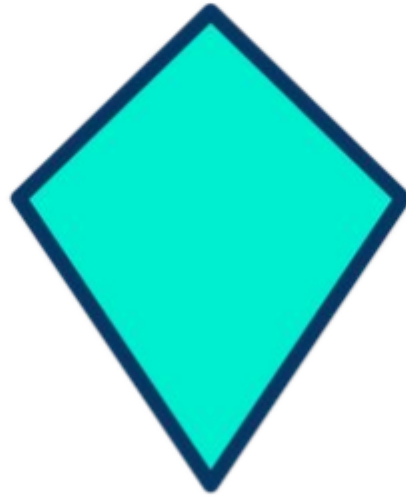
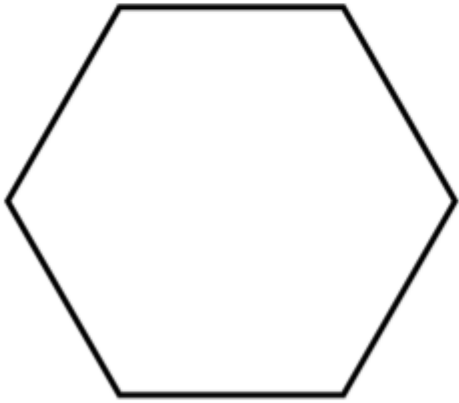
Q2

Find the obtuse angle here



## Part B

Look at these shapes and decide what each of the different angles are (acute, obtuse or right-angle)



Challenge - Can you draw a shape which has an acute angle, an obtuse angle and a right angle?



If you would like to complete some more learning on different types of angles, use the link below and then complete the worksheets on the next few slides.

<https://vimeo.com/430336836>

## Compare angles

1 Here are some angles.

a) Circle the angle that is greater than a right angle.



b) Circle the angle that is less than 90 degrees.



2 Draw three different angles that are less than a right angle.

Compare answers with a partner.

Complete the sentence.

These are all examples of \_\_\_\_\_ angles.

3 Draw two different obtuse angles.

Compare answers with a partner.

Complete the sentence.

Obtuse angles are greater than  degrees

but less than  degrees.

4 Is the angle between the hands of the clock acute or obtuse?

a)



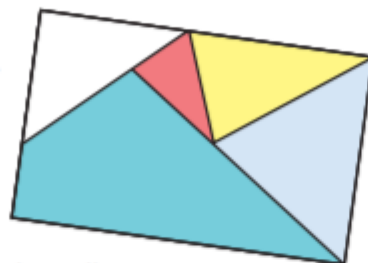
\_\_\_\_\_

b)

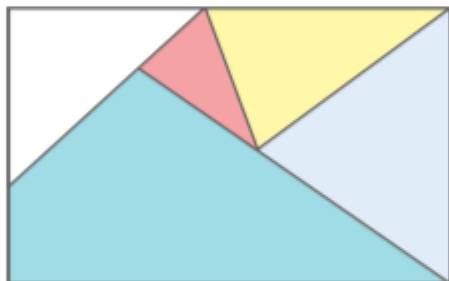


\_\_\_\_\_

- 5 Here is a piece of wallpaper.



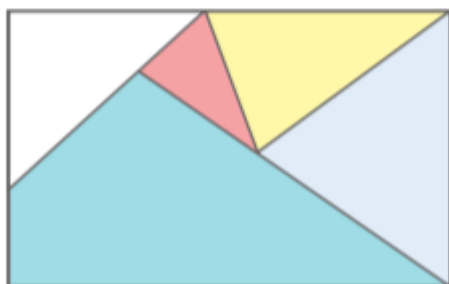
- a) Mark two right angles on the wallpaper.



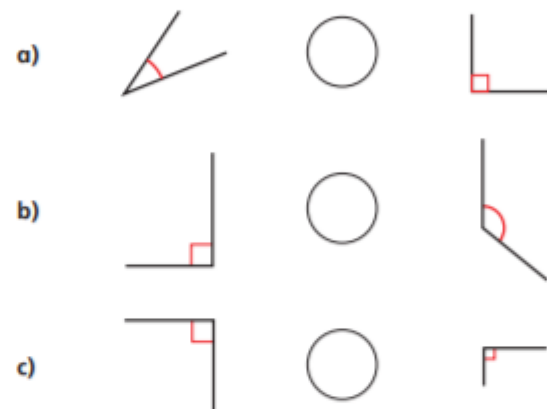
- b) Mark four acute angles on the wallpaper.



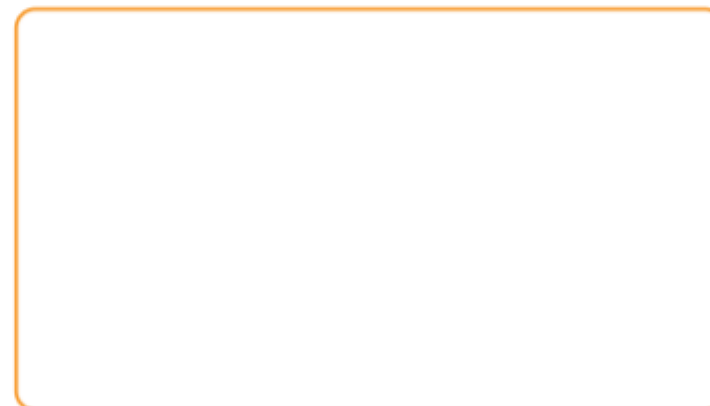
- c) Mark two obtuse angles on the wallpaper.



- 6 Write  $<$ ,  $>$  or  $=$  to compare the sizes of the angles.



- 7 Draw a shape that has one right angle, two acute angles and one obtuse angle.



Compare answers with a partner.

What is the same and what is different about your shapes?



# Challenge

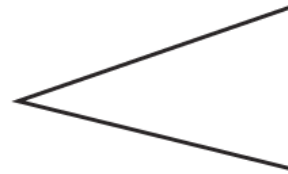
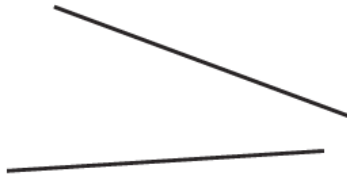
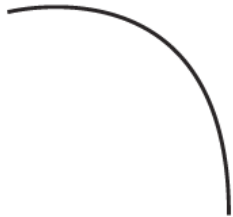
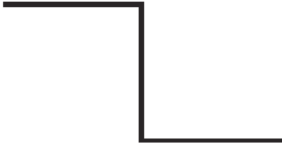
- 1) Complete the sentence below:

An angle is made when two \_\_\_\_\_ lines meet at a point.

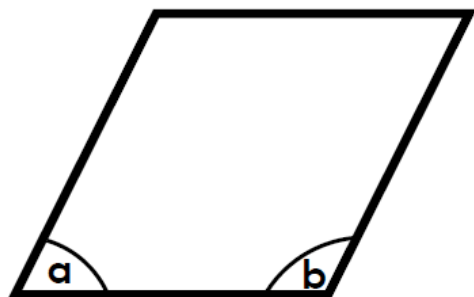
If I turn  $90^\circ$ , I will have made a \_\_\_\_\_ turn.

$90^\circ$  is the size of a \_\_\_\_\_ angle.

- 2) Circle the pictures below that show angles:

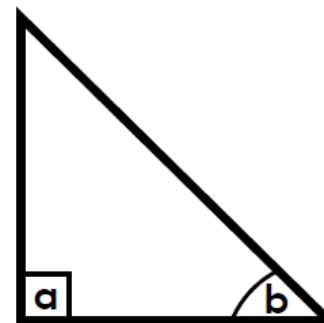


3a. Label angles a and b in this shape as acute, right angle or obtuse.



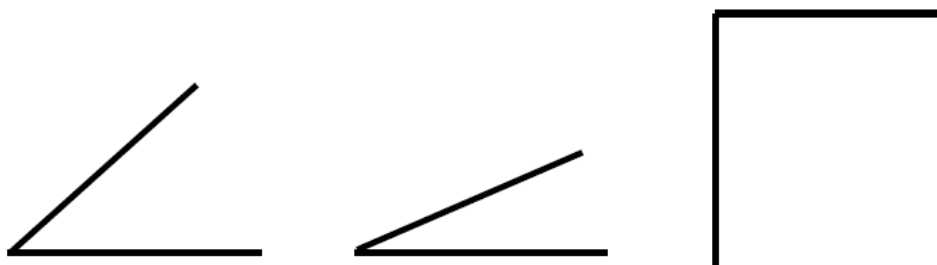
VF

3b. Label angles a and b in this shape as acute, right angle or obtuse.



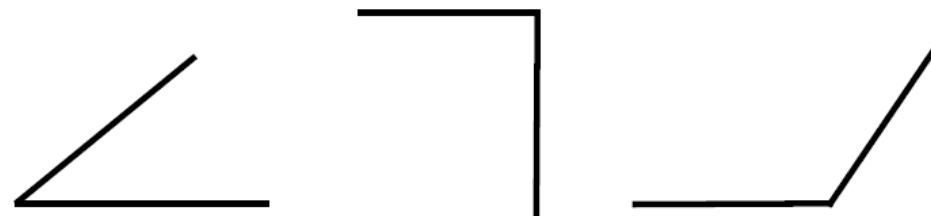
VF

5a. Label each of these angles as either obtuse, acute or right angle.



VF

5b. Label each of these angles as either obtuse, acute or right angle.



VF