

# Year 6

Friday 24<sup>th</sup> April 2020

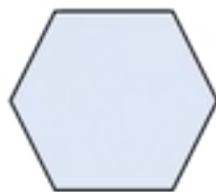
## Maths



Try the flashback 4 on the next slide.

1) The angles in a triangle add up to which total?

$90^\circ$        $180^\circ$        $270^\circ$        $360^\circ$



2) Estimate the size of the angle.



3) Write down the ratio of carrots to apples.

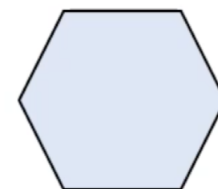


4) Write  $\frac{13}{20}$  as a percentage.

# Flashback 4

1) The angles in a triangle add up to which total?

- $90^\circ$        $180^\circ$        $270^\circ$        $360^\circ$        **$180^\circ$**



Hexagon

2) Estimate the size of the angle.



**about  $150^\circ$**

3) Write down the ratio of carrots to apples.



**5 : 2**

4) Write  $\frac{13}{20}$  as a percentage.

**65%**



[A video of the lesson is available here – lesson 3.](#)

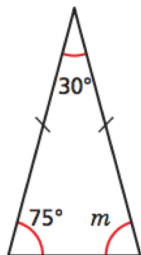
This will teach you everything you need to know.

The independent work continues on the next two slides.

There are 7 questions and 3 extensions.

# Angles in a triangle – special cases

1 Here is a triangle.



a) What type of triangle is it?

\_\_\_\_\_

How do you know?

\_\_\_\_\_  
\_\_\_\_\_

b) Work out the size of angle  $m$ .

c) What do you notice?

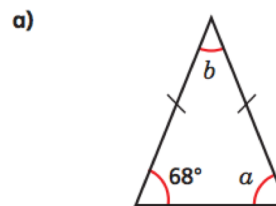
d) Complete the sentence to describe the angles in an isosceles triangle.

In an isosceles triangle \_\_\_\_\_

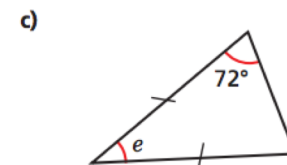
2 Identify and label the angles that will be equal in each triangle.



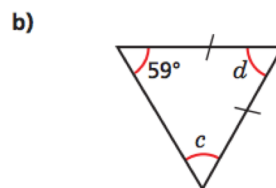
3 Work out the sizes of the unknown angles.



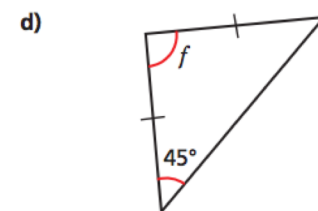
$a =$    $b =$



$e =$



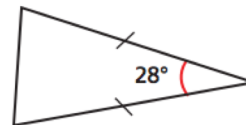
$c =$    $d =$



$f =$

Talk about your reasons with a partner.

4 Dexter is working out the unknown angles in triangles.



I can't work out either of the missing angles because I don't have enough information.

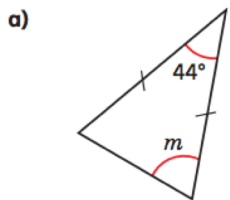


Do you agree with Dexter? \_\_\_\_\_

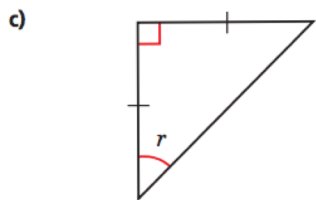
Explain your answer.

\_\_\_\_\_  
\_\_\_\_\_

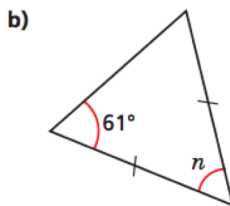
5 Work out the sizes of the unknown angles.



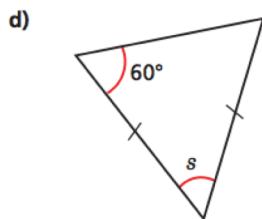
$m =$



$r =$

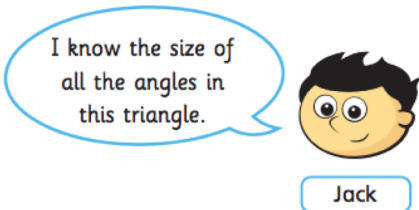
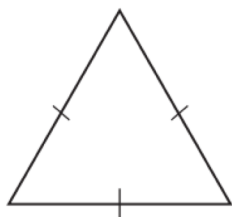
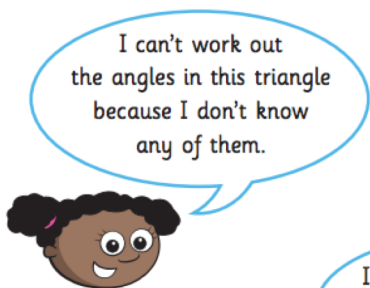


$n =$



$s =$

6 Whitney and Jack are working out the angles in this triangle.



Who do you agree with? \_\_\_\_\_

Talk about it with a partner.

7 Are the statements true or false?

- a) Every isosceles triangle is equilateral. \_\_\_\_\_
- b) Every equilateral triangle is isosceles. \_\_\_\_\_
- c) A right-angled triangle can be equilateral. \_\_\_\_\_
- d) A right-angled triangle can be isosceles. \_\_\_\_\_

Explain your answers to a partner.

### Ext 1

Two angles in a triangle are  $43^\circ$  and  $74^\circ$ .

Is the triangle isosceles? \_\_\_\_\_

Show your workings.

### Ext 2

One angle in an isosceles triangle is  $29^\circ$ .

What could the other angles be? Give two possible answers.

\_\_\_\_\_

### Ext 3

Angle  $b$  is twice the size of angle  $a$ .

Work out the size of angle  $c$ .

