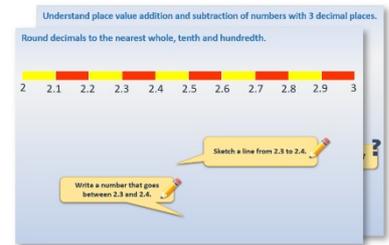


Year 4: Week 4, Day 5

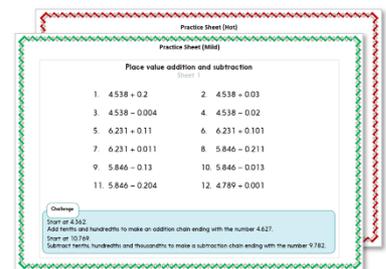
Sorting triangles

Each day covers one maths topic. It should take you about 1 hour or just a little more.

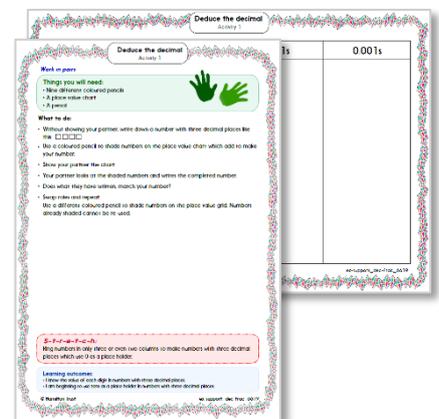
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



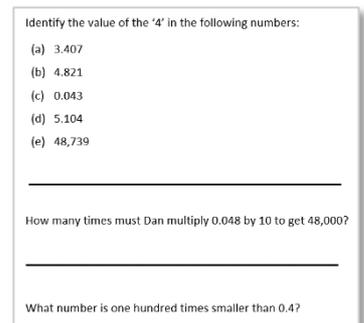
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



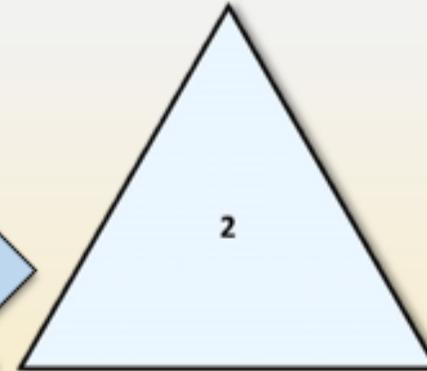
Learning Reminders

Describe, name and sort triangles, identifying their properties.



Triangle 1 is called an **isosceles triangle**. The name comes from the Greek iso (same) and skelos (leg). It has **2 equal sides** and **1 line of symmetry**.

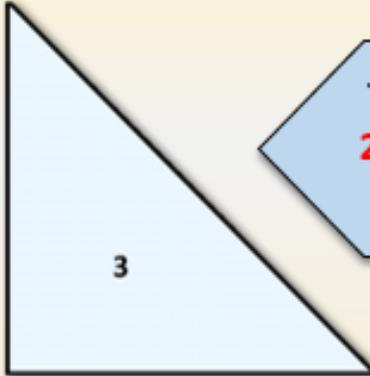
Triangle 2 is called an **equilateral triangle**. It is a **regular shape** as all its sides and angles are equal. It has **3 lines of symmetry**.



What is the same about Triangles 1 and 2; what is different?

Learning Reminders

Describe, name and sort triangles, identifying their properties.



Triangle 3 has a **right angle** and **2 equal sides**. It is a **right angled isosceles triangle**.

Triangle 4 has **2 equal sides** so is also an **isosceles triangle**. Both these triangles have **1 line of symmetry**.

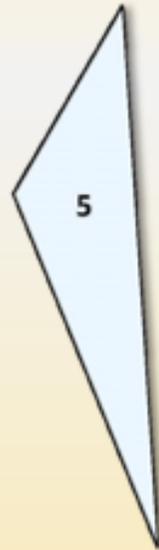


What is the same about Triangles 3 and 4; what is different?



Learning Reminders

Describe, name and sort triangles, identifying their properties.



What do you notice
about Triangle 5?

Triangle 5 is neither symmetrical
nor has a right angle. Completely
irregular triangles are called **scalene**.

Try drawing another
scalene triangle.



Practice Sheet Mild

Triangles

Use a set square to check if each triangle has a right angle. If it does, mark it on.
Write the name of each type of triangle and write two facts about it.

1.

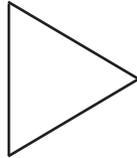


Name: _____

1. _____

2. _____

2.

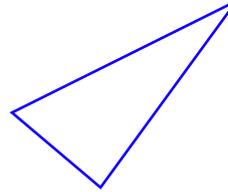


Name: _____

1. _____

2. _____

3.

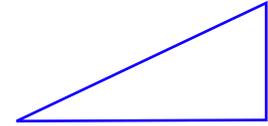


Name: _____

1. _____

2. _____

4.

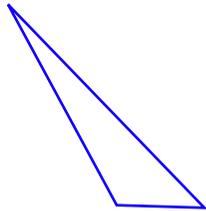


Name: _____

1. _____

2. _____

5.

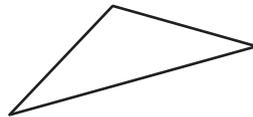


Name: _____

1. _____

2. _____

6.

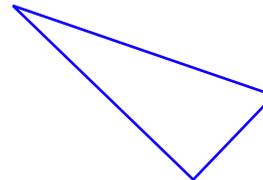


Name: _____

1. _____

2. _____

7.

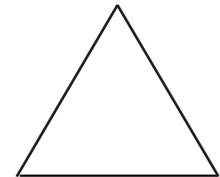


Name: _____

1. _____

2. _____

8.



Name: _____

1. _____

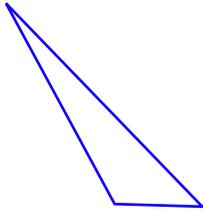
2. _____

Practice Sheet Hot

Triangles

Use a set square to check if each triangle has a right angle. If it does, mark it on.
Write the name of each type of triangle and write two facts about it.

1.

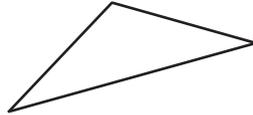


Name: _____

1. _____

2. _____

2.

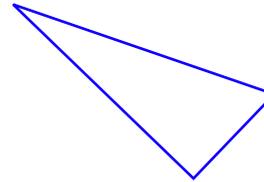


Name: _____

1. _____

2. _____

3.

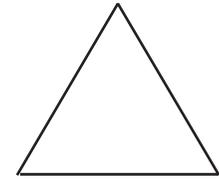


Name: _____

1. _____

2. _____

4.

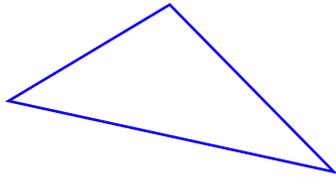


Name: _____

1. _____

2. _____

5.

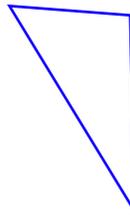


Name: _____

1. _____

2. _____

6.

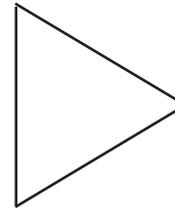


Name: _____

1. _____

2. _____

7.

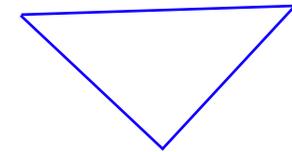


Name: _____

1. _____

2. _____

8.



Name: _____

1. _____

2. _____

Practice Sheets Answers

Triangles (mild)

- | | | |
|-----------------|----------------|--------------|
| 1. Isosceles | 2. Equilateral | 3. Scalene |
| 4. Right angled | 5. Scalene | 6. Isosceles |
| 7. Right angled | 8. Equilateral | |

Triangles (hot)

- | | | |
|----------------|----------------------------|-----------------|
| 1. Scalene | 2. Isosceles | 3. Right angled |
| 4. Equilateral | 5. Scalene | 6. Scalene |
| 7. Equilateral | 8. Isosceles, right angled | |

A Bit Stuck? What's special?

Things you will need:

- A sheet of triangles
- Scissors
- Ruler
- Right angle measurer (you could use the corner of a sheet of paper or a book)
- A Carroll diagram sheet
- Glue stick
- A pencil



What to do:

1. Cut out the triangles.
2. Take one and discuss where it belongs on the diagram.
3. Once you are agreed, stick it in the correct place on the sheet.
4. Repeat with each triangle, one at a time.

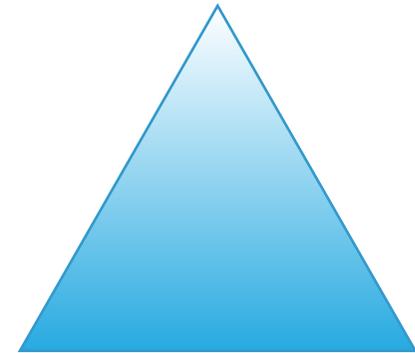
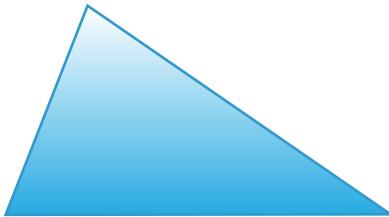
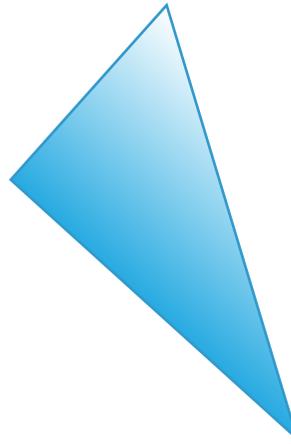
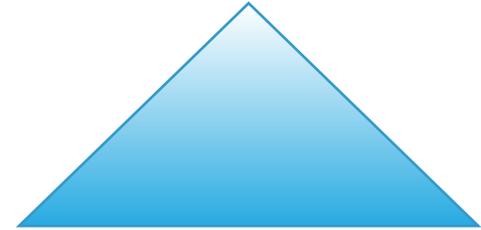
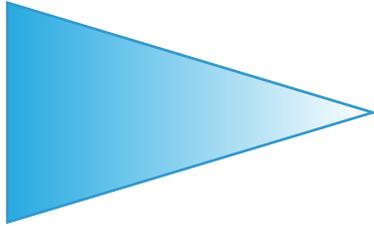
S-t-r-e-t-c-h:

Choose a different way to sort the triangles.

Learning outcomes:

- I can identify and describe properties of triangles.
- I can sort triangles according to their properties.
- I am beginning to find my own way to sort triangles.

A Bit Stuck?
What's special?



A Bit Stuck?
What's special?

| | Symmetrical | Not symmetrical |
|-----------------------------|-------------|-----------------|
| Has a right angle | | |
| Does not have a right angle | | |

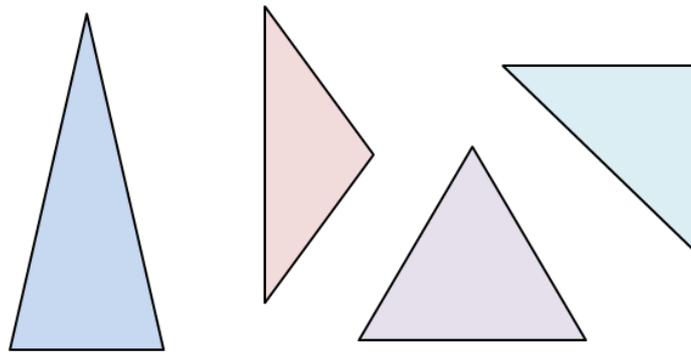
Check your understanding

Questions

Draw triangles to match each description:

- i. With a right angle and the shortest side is 3cm
 - ii. Two sides and two angles are equal
 - iii. No equal angles; one side twice as long as one other side
-

Make as many *generalisations* as you can about this collection of shapes:



Check your understanding

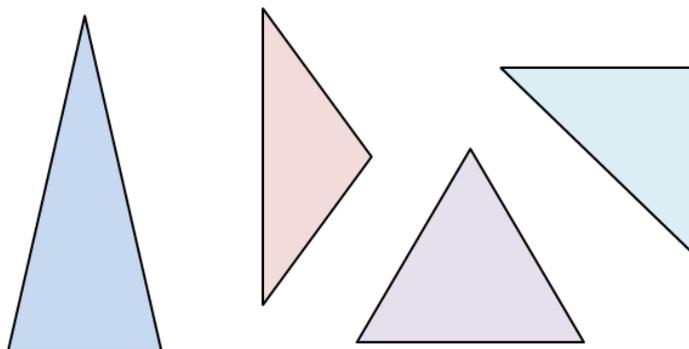
Answers

Draw triangles to match each description

- i. With a right angle and the shortest side is 3cm – check it has a right angle.
- ii. Two sides and two angles are equal Check it is isosceles.
- iii. No equal angles; one side twice as long as one other side Check the lengths of sides and that it is scalene.

Check children's drawings. For accurate drawings they should be using a sharp pencil and ruler. Can children name the triangles? They are, respectively, a right angled, an isosceles and a scalene triangle.

Make as many *generalisations* as you can about this collection of shapes:



They are all polygons.

They all have 3-sides.

They all have 3 angles.

They are all triangles.

The angles inside each total 180° .

At least 2 sides of each are equal.