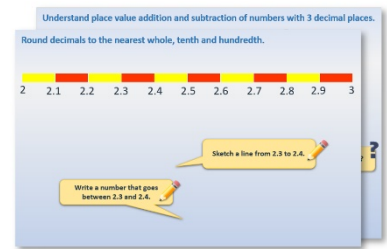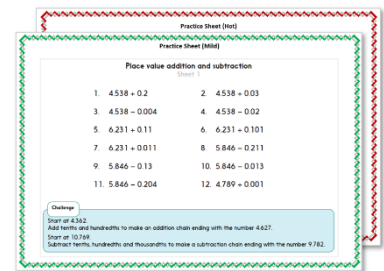# Week 8, Day 3
Angles in triangles

Each day covers one maths topic. It should take you about 1 hour or just a little more.
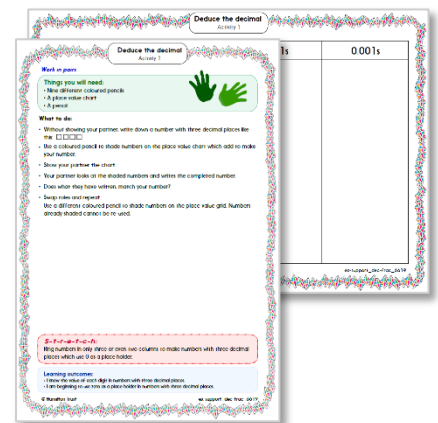
1. Start by reading through the **Learning Reminders**.
   They come from our *PowerPoint* slides.

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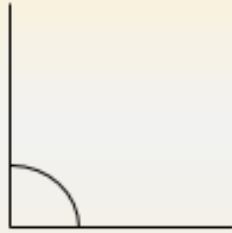   Hot (harder)!
   Check the answers.

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

4. Think you've cracked it? Whizzed through the Practice Sheets?
   Have a go at the **Investigation**…

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Learning Reminders

Recognise acute and obtuse angles.

A **right** angle or 90°.
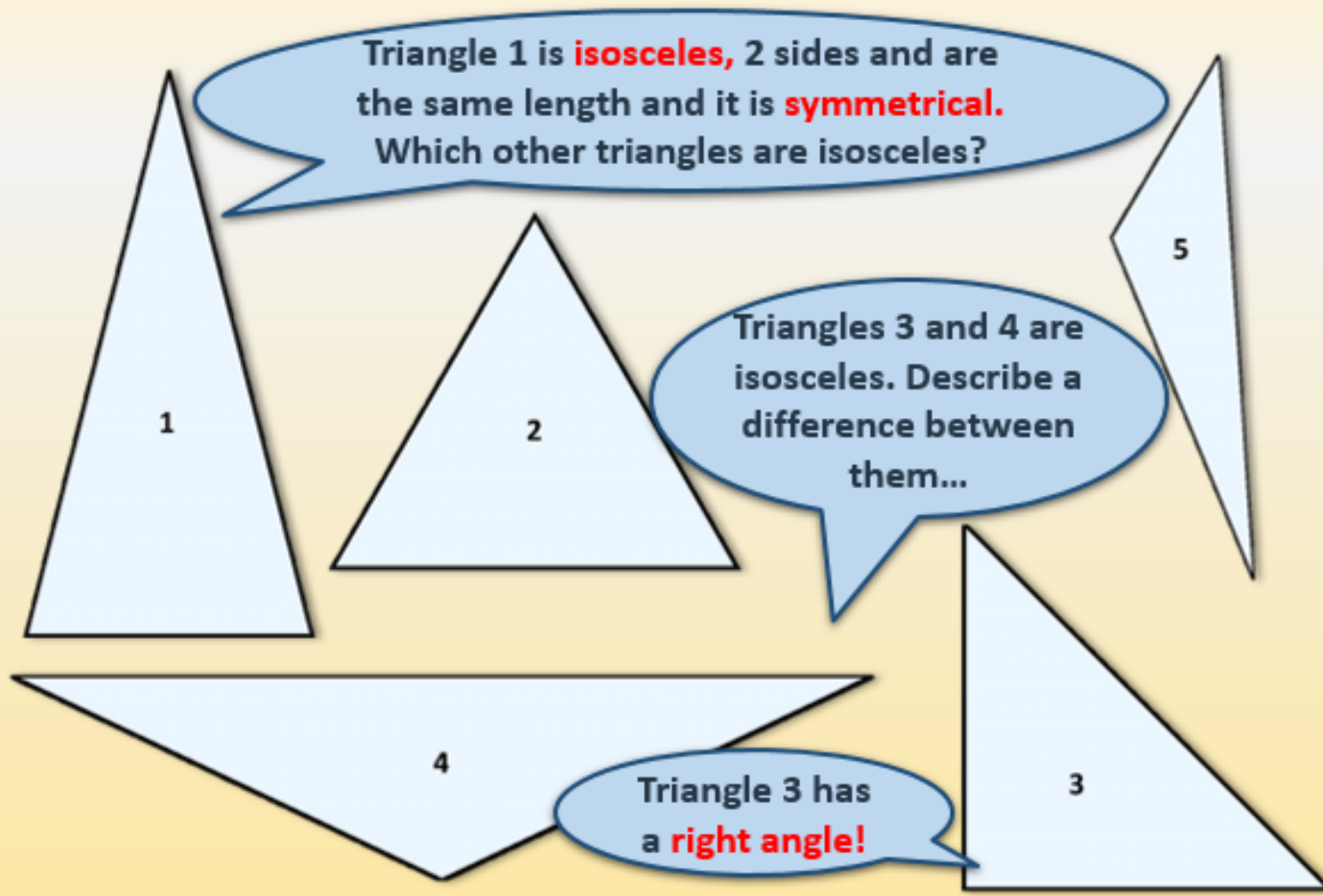
Angles smaller than 90° are called **acute** ('sharp').

Angles larger than 90° are called **obtuse** ('blunt').

Learning Reminders

Compare and classify triangles, based on properties including types of angles.

Triangle 1 is **isosceles**, 2 sides and are the same length and it is **symmetrical**. Which other triangles are isosceles?

Triangles 3 and 4 are isosceles. Describe a difference between them...

Triangle 3 has a **right angle!**

1

2

3

4

5

Learning Reminders

Learning Reminders

Compare and classify triangles, based on properties including types of angles.

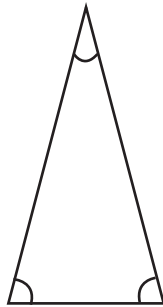How many **acute** and **obtuse** angles can you see in each triangle?

1

2

3

4

5

Compare and classify triangles, based on properties including types of angles.

How many **acute** and **obtuse** angles can you see in each triangle?

1 — 3 acute

2 — 3 acute

3 — 2 acute, 1 right angle

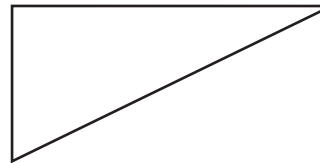4 — 2 acute, 1 obtuse

5 — 2 acute, 1 obtuse

Triangles and angles

Colour acute angles red. Colour obtuse angles blue. Mark right angles with a square.
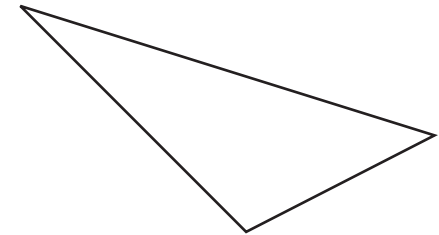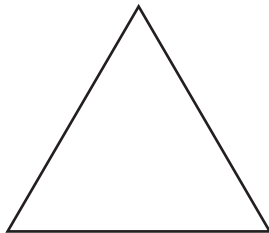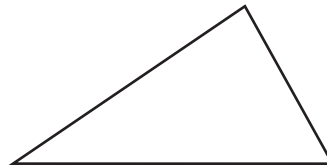Write the name of each type of triangle.

1.

_____

2.

_____

3.

_____

4.
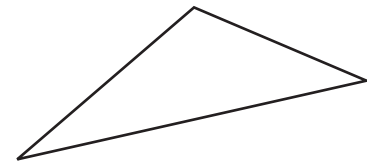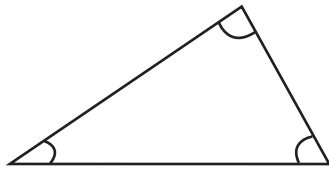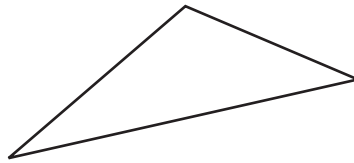
_____

5.

_____

6.

_____

Practice Sheet Hot
Triangles and angles

Colour acute angles red. Colour obtuse angles blue. Mark right angles with a square.
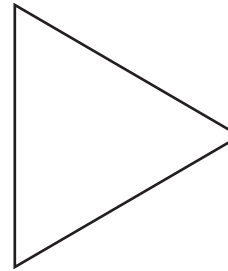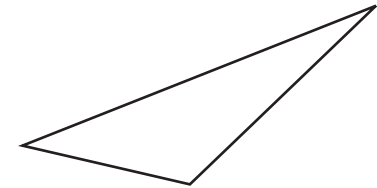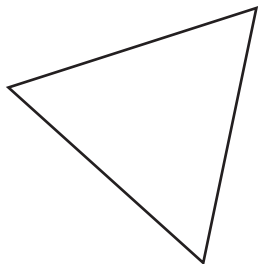Write the name of each type of triangle.

1.

_____

2.

_____

3.

_____

4.

_____

5.

_____

6.

_____
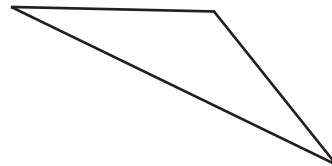
7.

_____
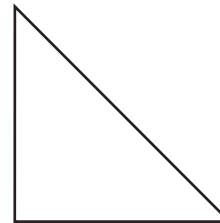
8.

_____
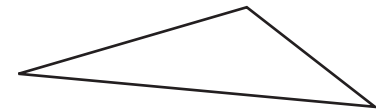
Practice Sheet Answers

Triangles and angles (Mild)

1. Isoceles triangle

2. Right angled triangle

3. Scalene triangle

4. equilateral triangle

5. Scalene triangle

6. Scalene triangle

Triangles and angles (Hot)

1. Scalene triangle

2. Scalene triangle

3. Equilateral triangle

4. Scalene triangle

5. Equilateral triangle

6. Isoceles triangle
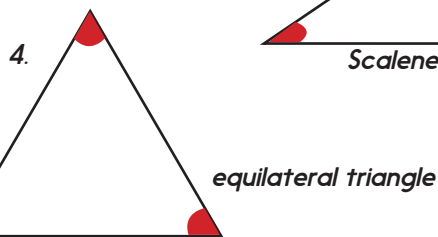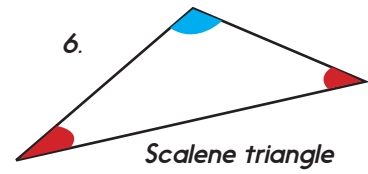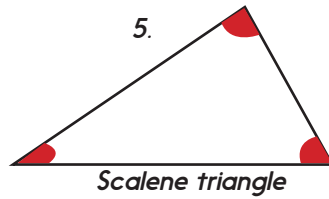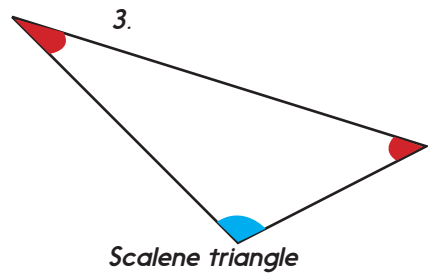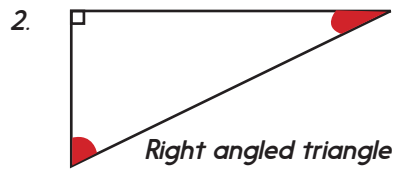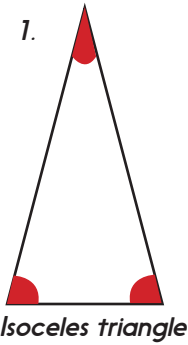
7. Right-angled triangle
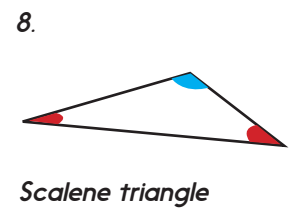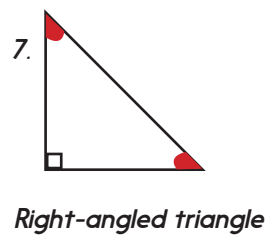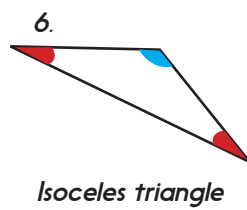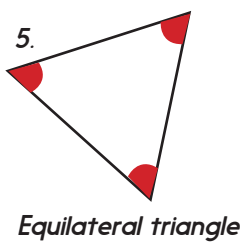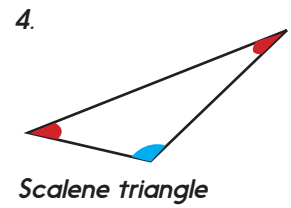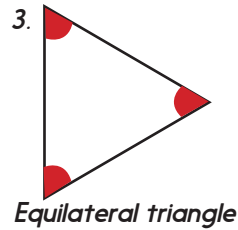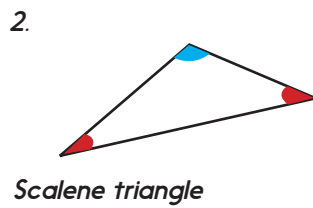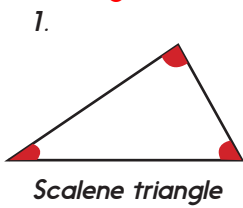
8. Scalene triangle

Work in pairs

Things you will need:
• A right angle measure
  (the 'square' corner of a piece of paper will work)
• A pencil

What to do:

• Use your right angle measure to test if each angle is acute, obtuse or
  a right angle. Ring the correct description for each angle.

acute/right angle/obtuse   acute/right angle/obtuse   acute/right angle/obtuse   acute/right angle/obtuse

acute/right angle/obtuse   acute/right angle/obtuse   acute/right angle/obtuse

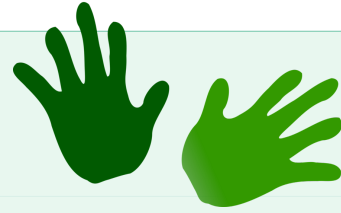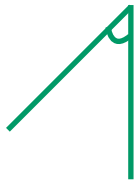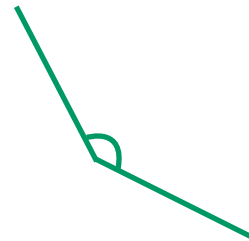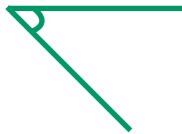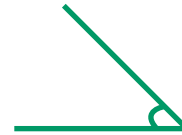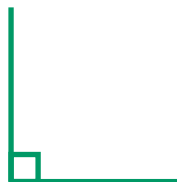acute/right angle/obtuse   acute/right angle/obtuse   acute/right angle/obtuse

S-t-r-e-t-c-h:
Investigate by drawing, how many acute angles it is possible to have in a triangle.
How many right angles do you think can be in a triangle?
How many obtuse angles do you think can be in a triangle?

Learning outcomes:
• I can identify acute, right and obtuse angles.
• I am beginning to draw acute, right and obtuse angles.

Investigation
Triangle angles

Investigate, by sketching, how many acute angles and how many obtuse angles each type of triangle can have.
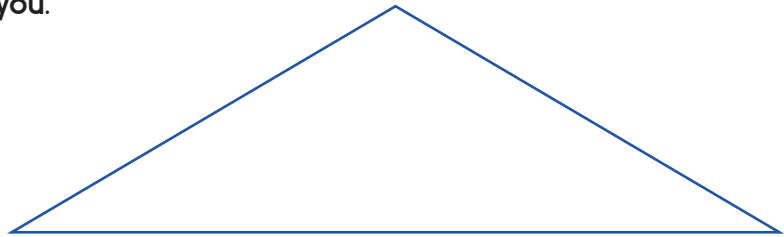
Try to draw at least two triangles of each type. (This may not be possible!)

Record your findings in a table like the one below

This triangle is recorded for you.

Equilateral triangles	Isosceles triangles	Right-angled triangles	Scalene triangles
	2 acute angles 1 obtuse angle		

Challenge

Draw a right-angled triangle that is also an isosceles triangle.
What size are the two angles that are not a right angle?