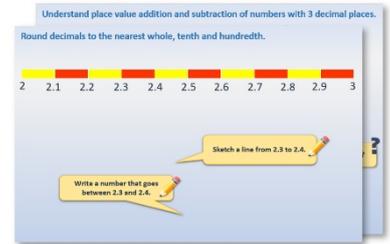


# Week 13, Day 4

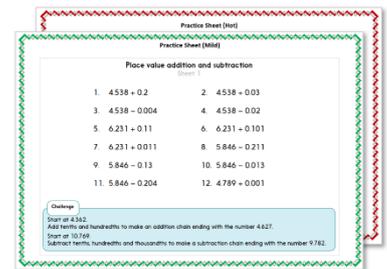
## Right angles

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

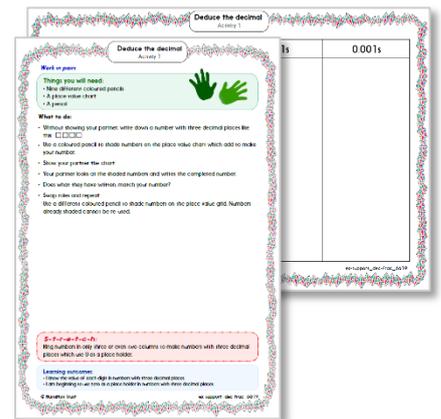
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



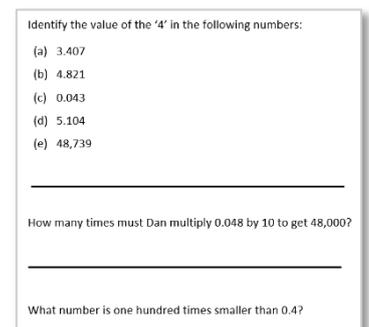
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



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

**Identify right angles.**

Which one of these two shapes is a square?

One, both or neither?



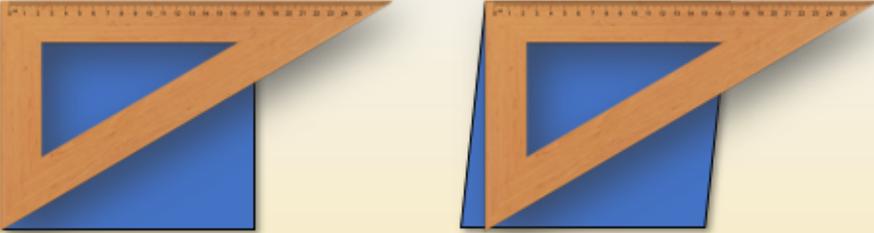
All the sides in each shape are the same length...

Each angle in a square must be a right angle.

The image shows two blue quadrilaterals. The one on the left is a square, and the one on the right is a rhombus. The square has all four sides of equal length and all four angles are right angles. The rhombus has all four sides of equal length but its angles are not right angles.

**Identify right angles.**

We can use a set square to check which is the square.



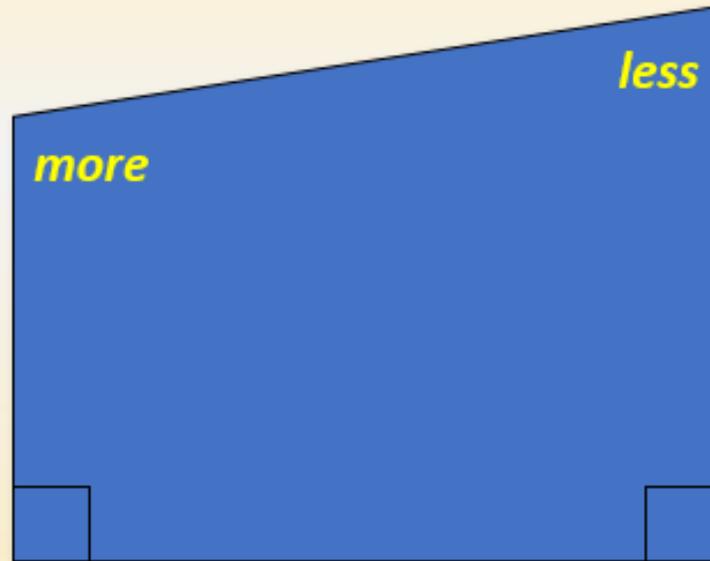
This is the square.

This is a rhombus.

The image shows the same square and rhombus as in the previous slide, but with a wooden set square placed against each. The set square is a right-angled triangle with a square corner. It is placed against the top-left corner of the square and the top-left corner of the rhombus. The set square fits perfectly against the square, but it does not fit against the rhombus, demonstrating that only the square has right angles.

## Learning Reminders

Identify whether angles are greater than or less than a right angle.



We can draw a small square to show a right angle.

Which angle is less than a right angle?

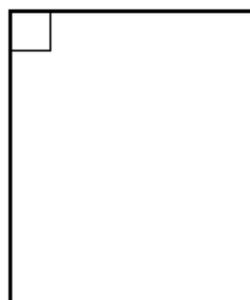
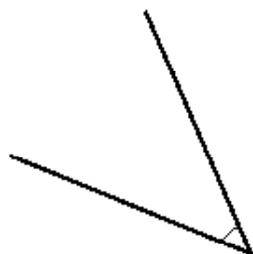
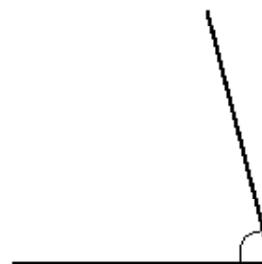
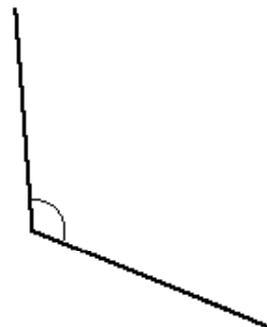
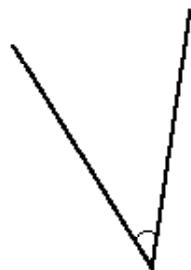
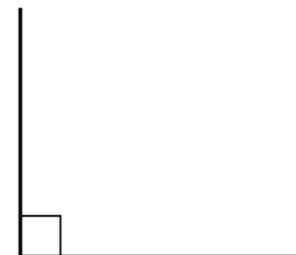
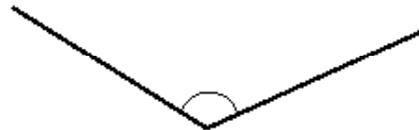
Which angle is more than a right angle?

## Practice Sheet Mild

### Naming angles

Label angles less than a right angle with L for 'less'.

Label angles more than a right angle with M for 'more'.

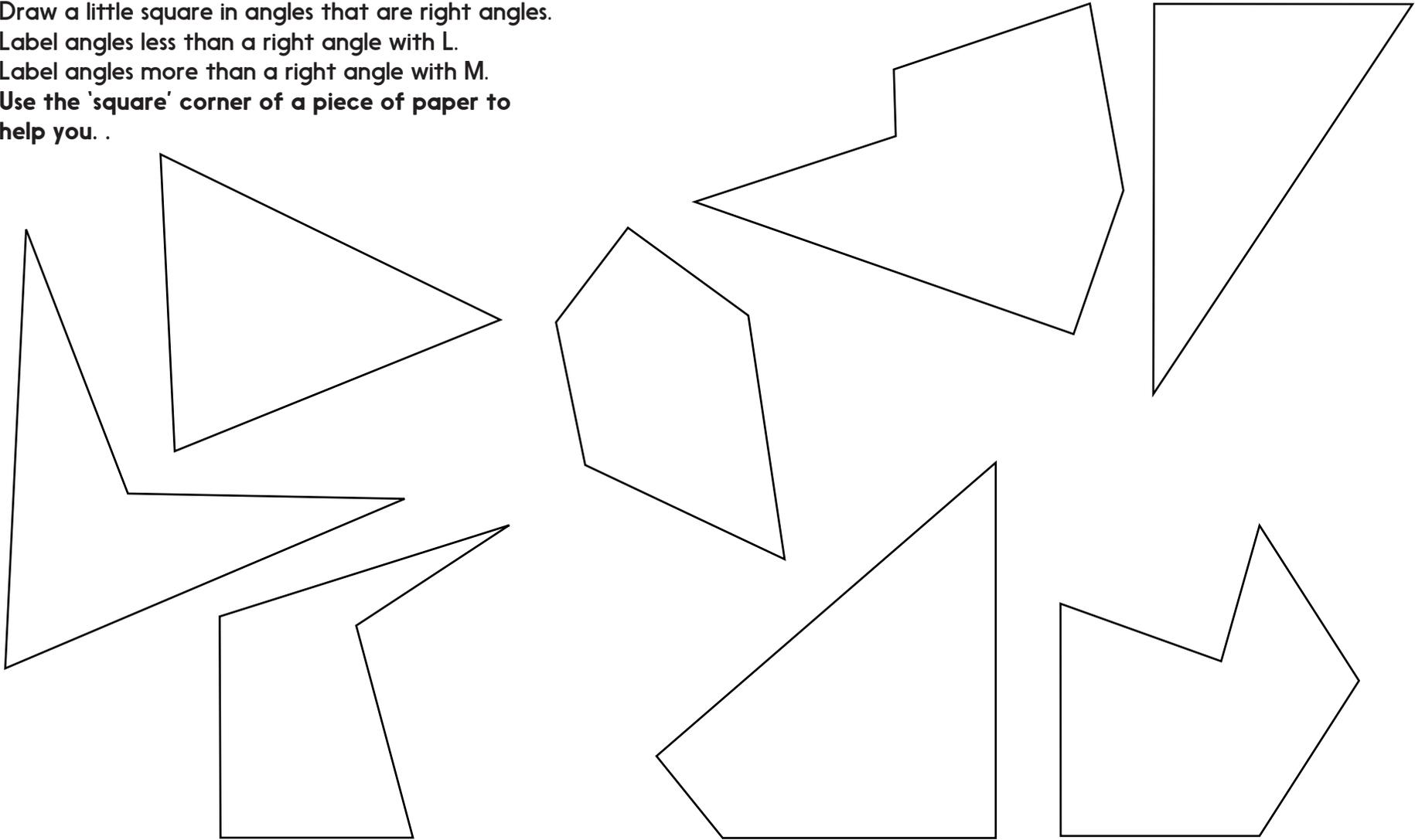


#### Challenge

Draw two more angles of each type, in different orientations.

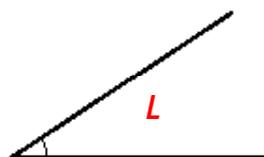
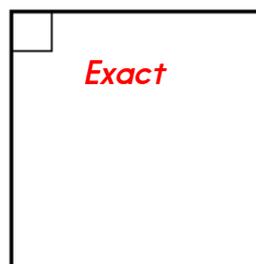
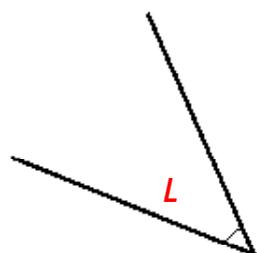
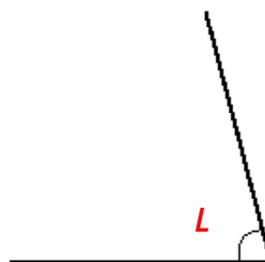
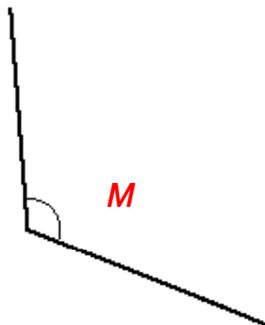
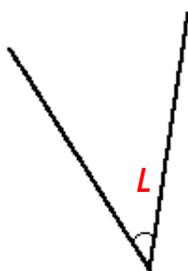
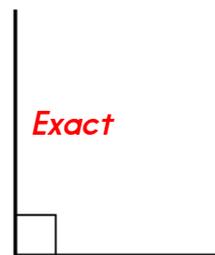
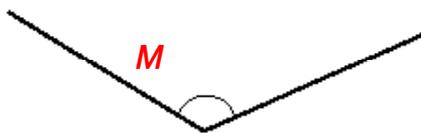
## Practice Sheet Hot Angles

Draw a little square in angles that are right angles.  
Label angles less than a right angle with L.  
Label angles more than a right angle with M.  
Use the 'square' corner of a piece of paper to help you. .



# Practice Sheet Answers

## Practice Sheet (Mild)

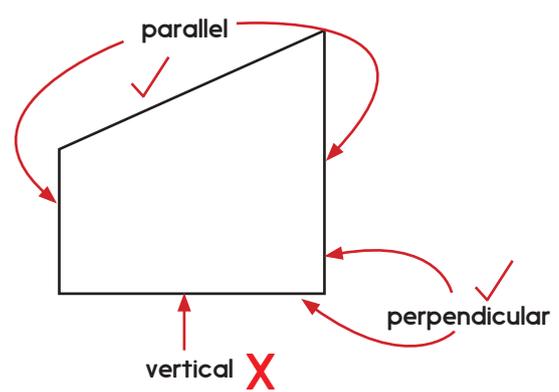
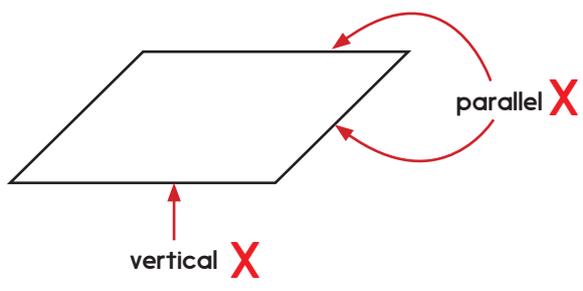
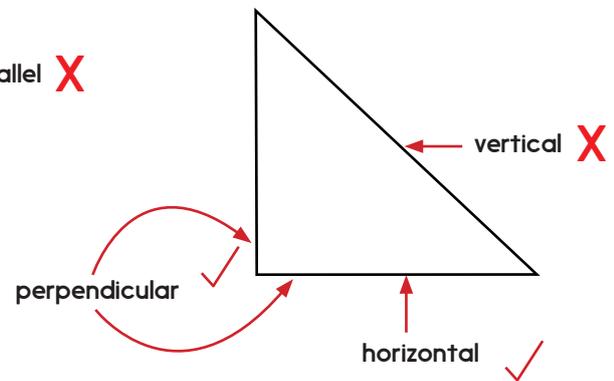
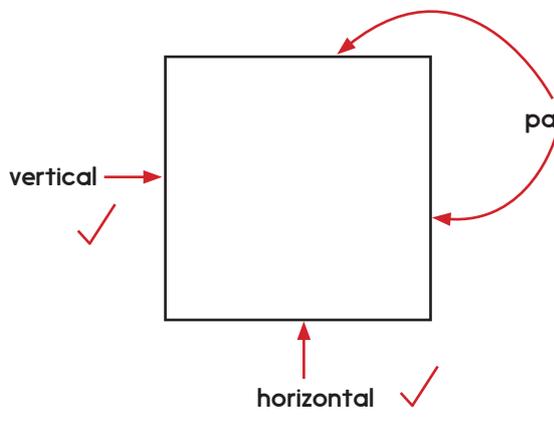
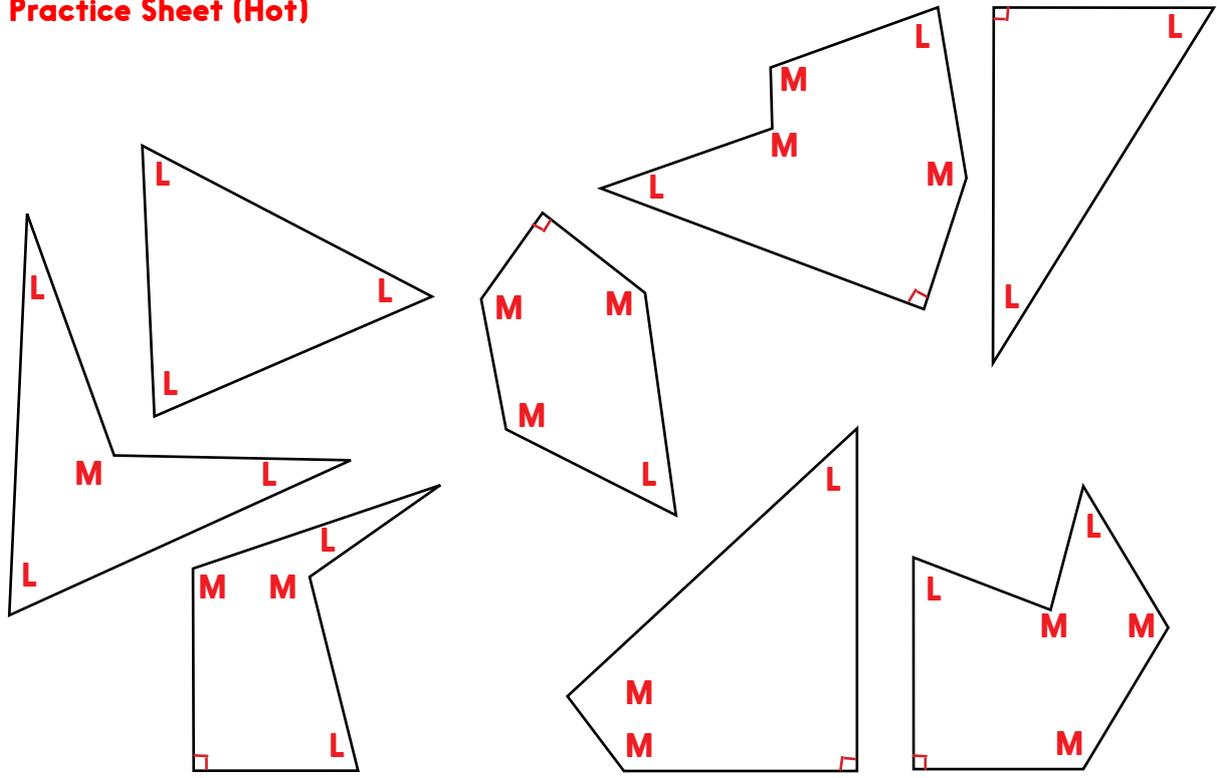


### Challenge

Accept children's drawings of acute, right and obtuse angled triangles in different orientations as in the above diagrams.

# Practice Sheet Answers

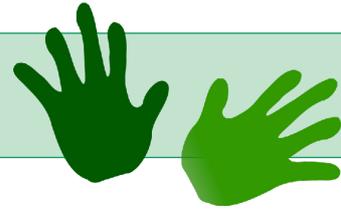
## Practice Sheet (Hot)



## A Bit Stuck? Right angle hunt

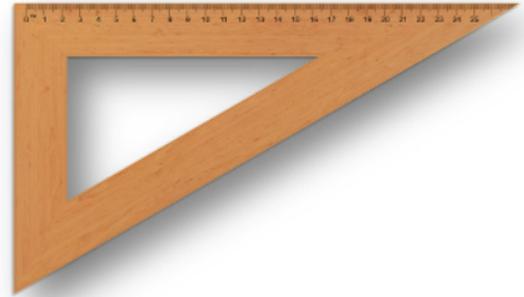
### Things you will need:

- A piece of paper



### What to do:

- Use a square (or the 'square' corner of a piece of paper) to find a **right angle**, an **angle less than a right angle** and an **angle greater than a right angle** in the room.
- If possible, go outside to find other examples of right angles, as well as angles that are more or less.
- Record by taking photos. You could ask an adult to help you to copy your pictures into one document and label the angles you have found.



lots of right angles



right angle



lots of right angles



right angle



less than a right angle

more than a right angle



## Check your understanding: Questions

Draw a shape with two right angles that is not a square.  
Identify any angle in this shape that is more than a right angle.

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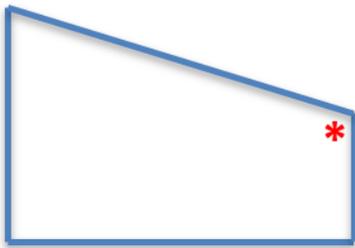
Draw a triangle with one angle less than a right angle and one angle more than a right angle.  
Is the third angle more or less than a right angle?

*Fold here to hide answers:*

---

## Check your understanding: Answers

Draw a shape with two right angles that is not a square.



Identify any angle in this shape that is more than a right angle.

This is just one possibility.

In this example, the angle marked \* is more than a right angle.

Draw a triangle with one angle less than a right angle and one angle more than a right angle.  
Is the third angle more or less than a right angle?

This is just one possibility. Since one angle is more than a right angle and the angle sum of a triangle is 180 degrees (two right angles), the other two angles *must* each be less than a right angle!

