

Year 3 and Year 4 Shape, Unit 1 (34972)

Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

Day 1 Y3 Symmetrical shapes Sheet 1

Working towards ARE / Working at ARE / Greater Depth
Greater Depth complete the Challenge.

Day 1 Y4 Symmetrical shapes Sheet 2

Working towards ARE / Working at ARE

Day 1 Y4 Symmetrical shapes Sheet 3

Greater Depth

Day 2 Y3 Angles and turns Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Day 2 Y4 Naming angles Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Day 3 Y3 Right angle turns Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Day 3 Y4 Triangles and angles Sheet 2

Working towards ARE

Day 3 Y4 Triangles and angles Sheet 3

Working at ARE / Greater Depth

Day 4 Y3 Angles Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Day 4 Y4 Angles in quadrilaterals Sheet 2

Working towards ARE

Day 4 Y4 Angles in quadrilaterals Sheet 3

Working at ARE / Greater Depth

Day 5 Y3 Vertical, horizontal, perpendicular and parallel lines Sheet 1

Working towards ARE / Working at ARE / Greater Depth
Greater Depth complete the Challenge.

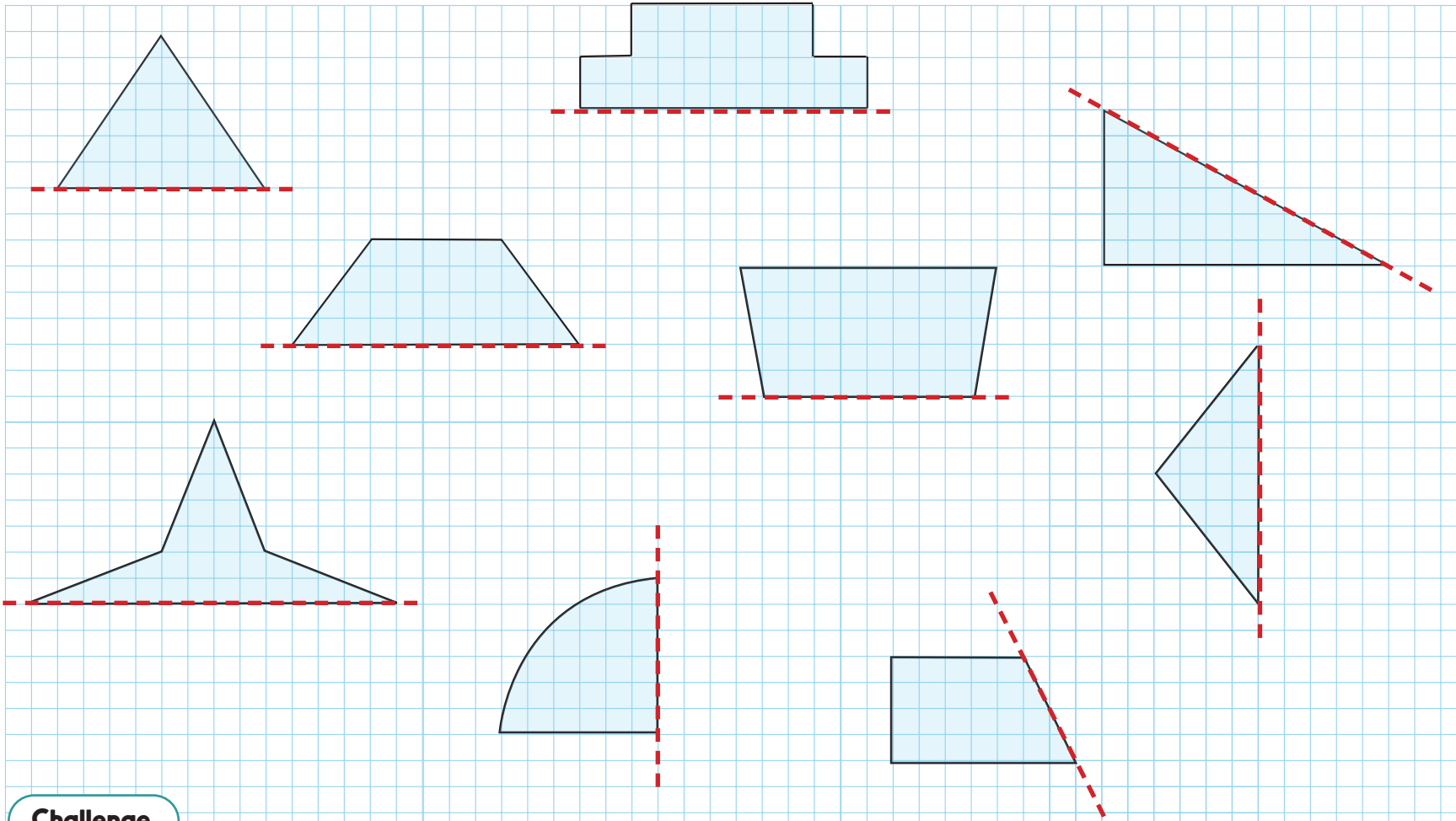
Day 5 Y4 Sorting quadrilaterals Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Symmetrical shapes

Sheet 1

Draw the other halves of these shapes so that the whole shape is symmetrical.



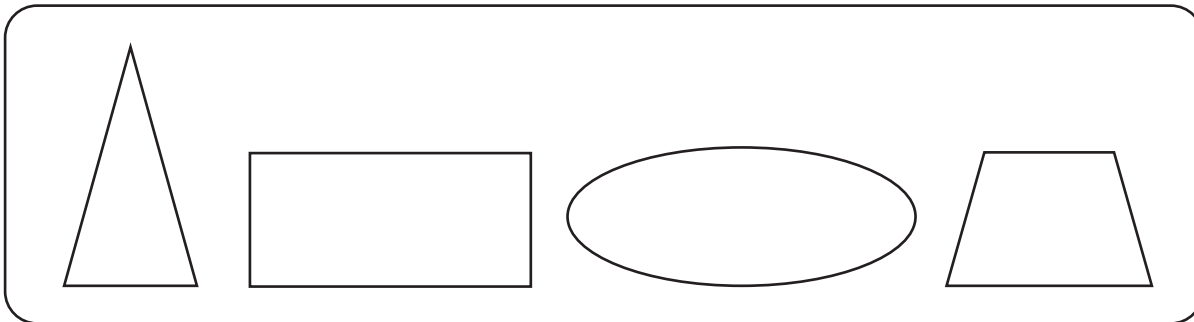
Challenge

Choose one of these shapes to draw in your book (don't draw the dotted mirror line). Now draw a different mirror line along one side of the shape. Draw the other half of the shape so that the whole shape is symmetrical. Repeat with other shapes if you have time.

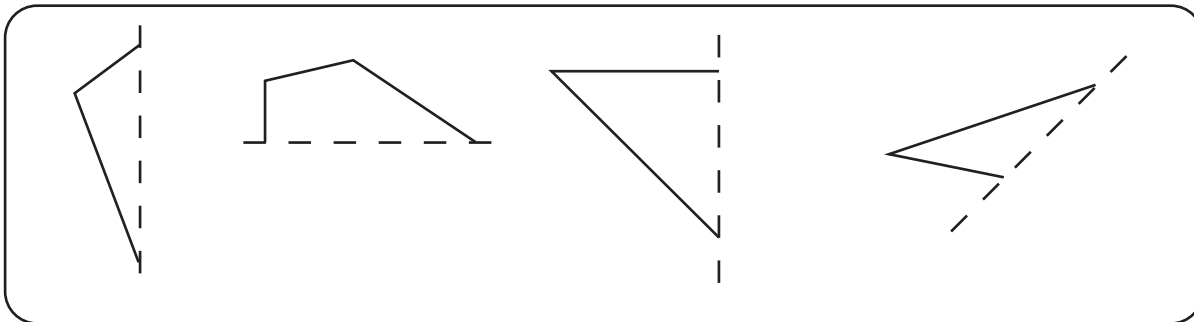
Symmetrical shapes

Sheet 2

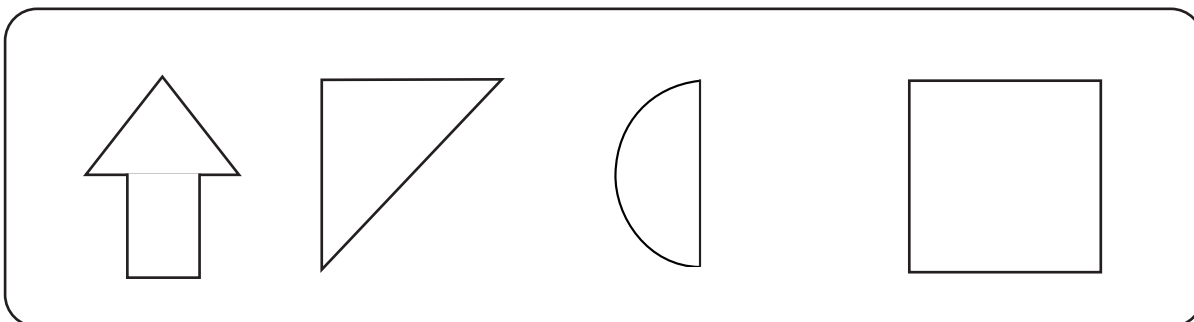
1. Draw all the lines of symmetry on these shapes.



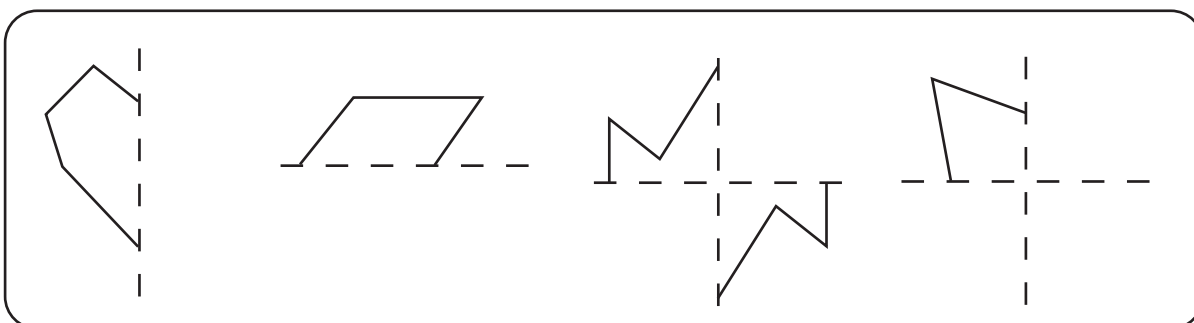
2. Complete these shapes to make them symmetrical across the dotted lines of symmetry.



3. Draw all the lines of symmetry on these shapes.



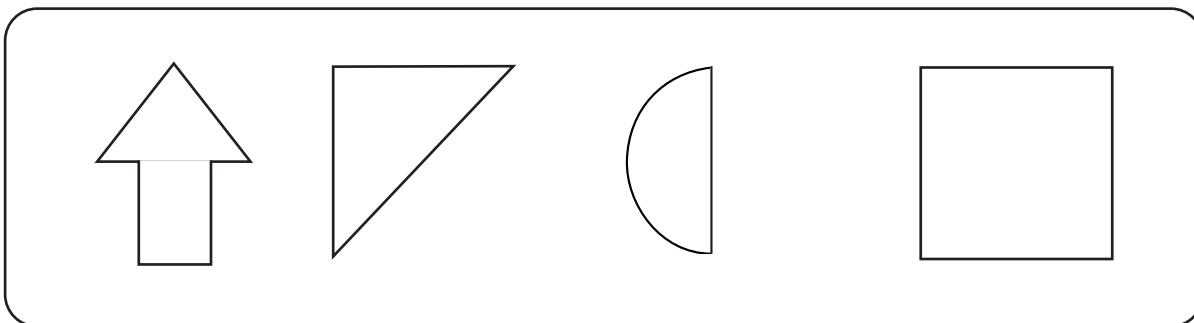
4. Complete these shapes to make them symmetrical.



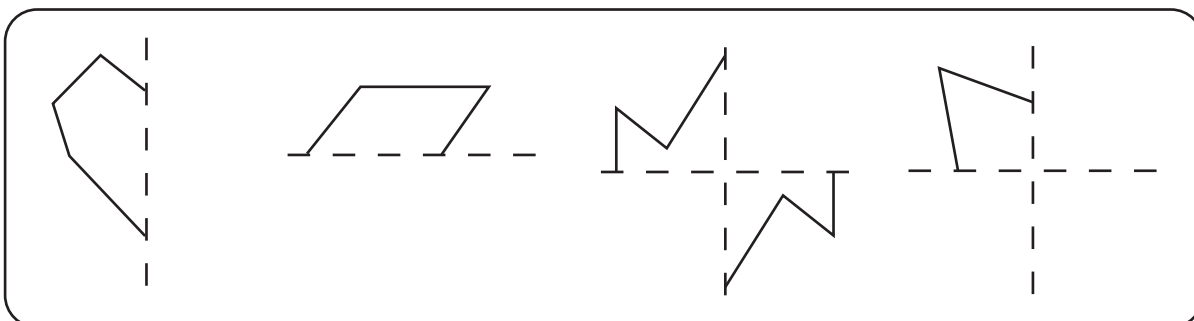
Symmetrical shapes

Sheet 3

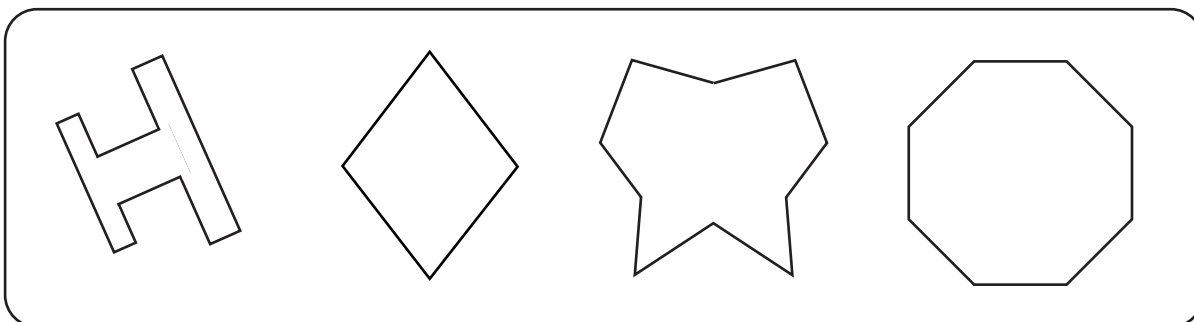
1. Draw all the lines of symmetry on these shapes.



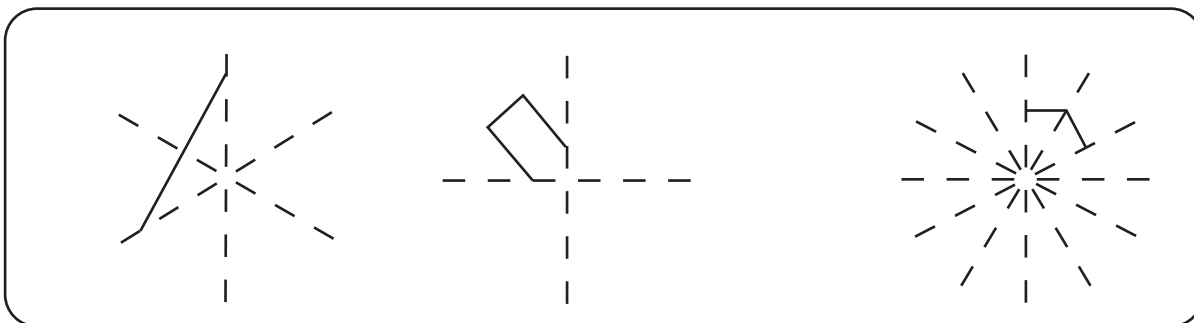
2. Complete these shapes to make them symmetrical across the dotted lines of symmetry.



3. Draw all the lines of symmetry on these shapes.



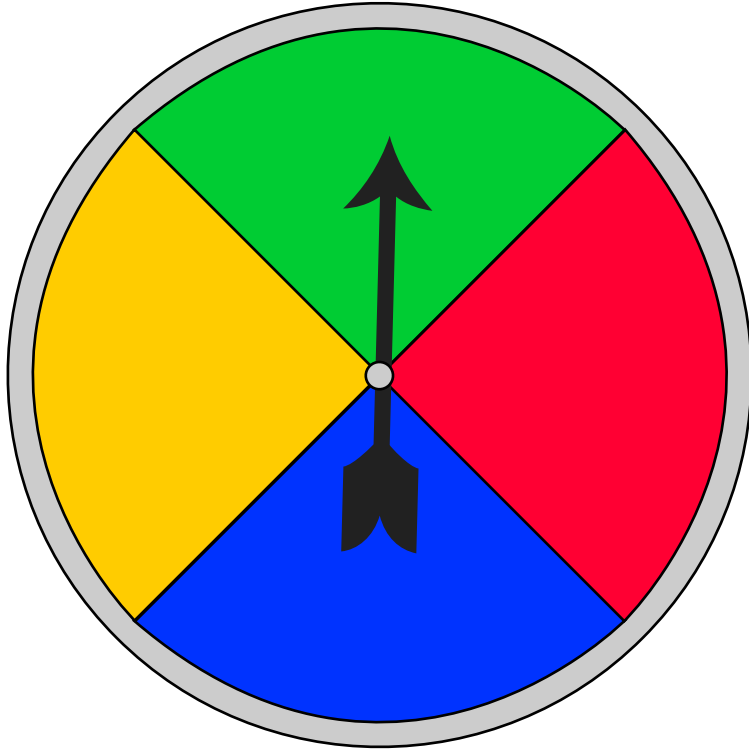
4. Complete these shapes to make them symmetrical.



Angles and turns

Sheet 1

The arrow is in its starting position.
Write what colour the arrow will be on after each spin.

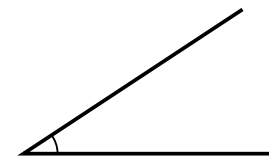
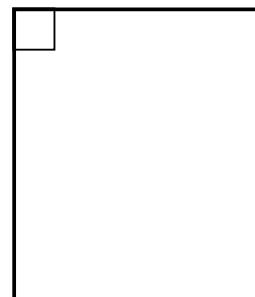
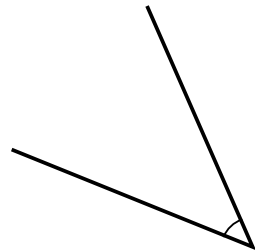
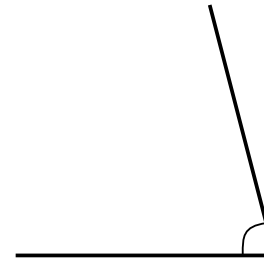
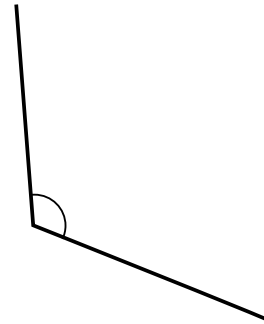
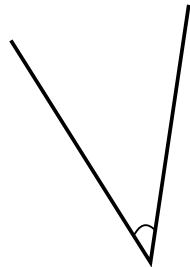
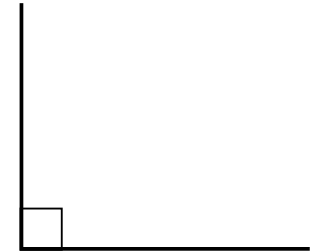
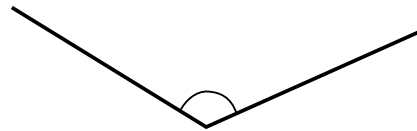
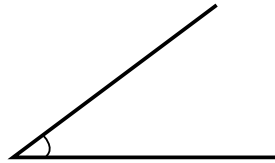


1. $\frac{1}{4}$ spin clockwise.
2. $\frac{1}{4}$ spin anticlockwise.
3. $\frac{1}{2}$ spin clockwise.
4. Two quarter turns clockwise.
5. Three quarter turns clockwise.
6. Three quarter turns anticlockwise.
7. One right angle turn anticlockwise.
8. Four right angle turns clockwise.
9. A 90 degree turn clockwise.
10. A 180 degree turn clockwise.

Naming angles

Sheet 2

Label each of these angles either acute, right or obtuse.



Challenge

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

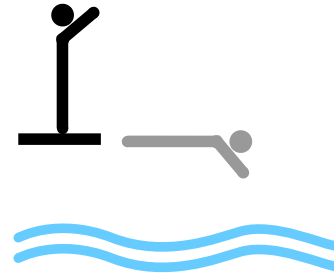
Right angle turns

Sheet 1

Tick true or false by the side of each statement.

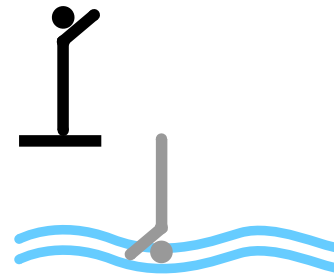
- | | True | False |
|---|--------------------------|--------------------------|
| 1. A right angle is 100 degrees. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. There are four right angle turns in a complete turn. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. There are three right angle turns in half a turn. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. There are two right angle turns in a half turn. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. There are 180 degrees in half a turn. | <input type="checkbox"/> | <input type="checkbox"/> |

6. This diver has turned through quarter of a turn.



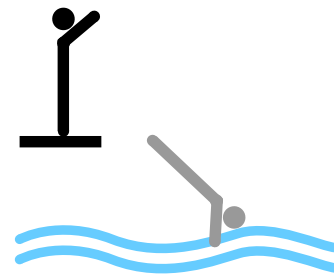
- | True | False |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |

7. This diver has turned through two right angle turns.



- | | |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|

8. This diver has turned through three right angle turns.



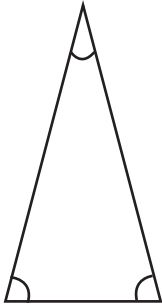
- | | |
|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|

Triangles and angles

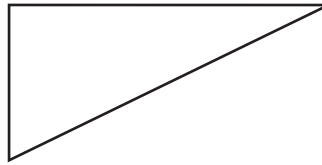
Sheet 2

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

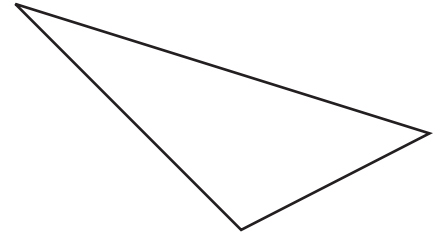
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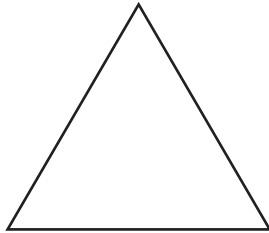
2.



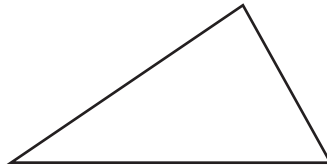
3.



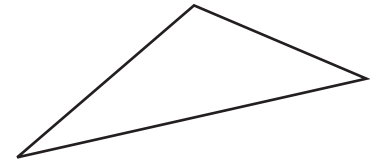
4.



5.



6.

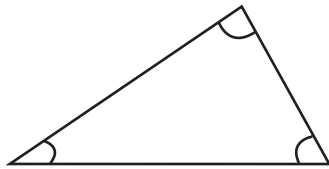


Triangles and angles

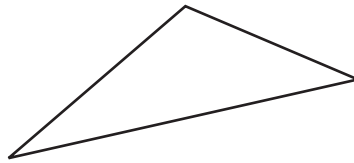
Sheet 3

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

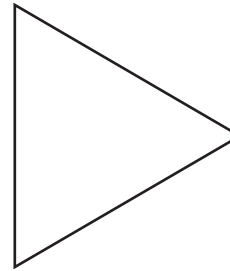
1.



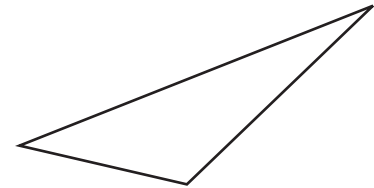
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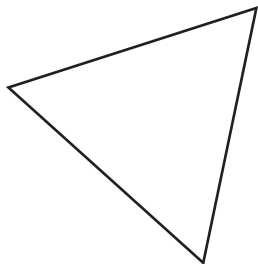
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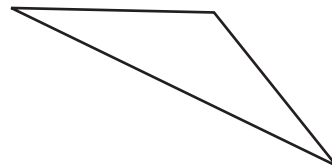
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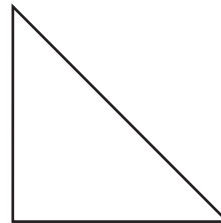
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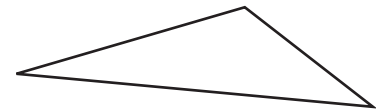
6.



7.



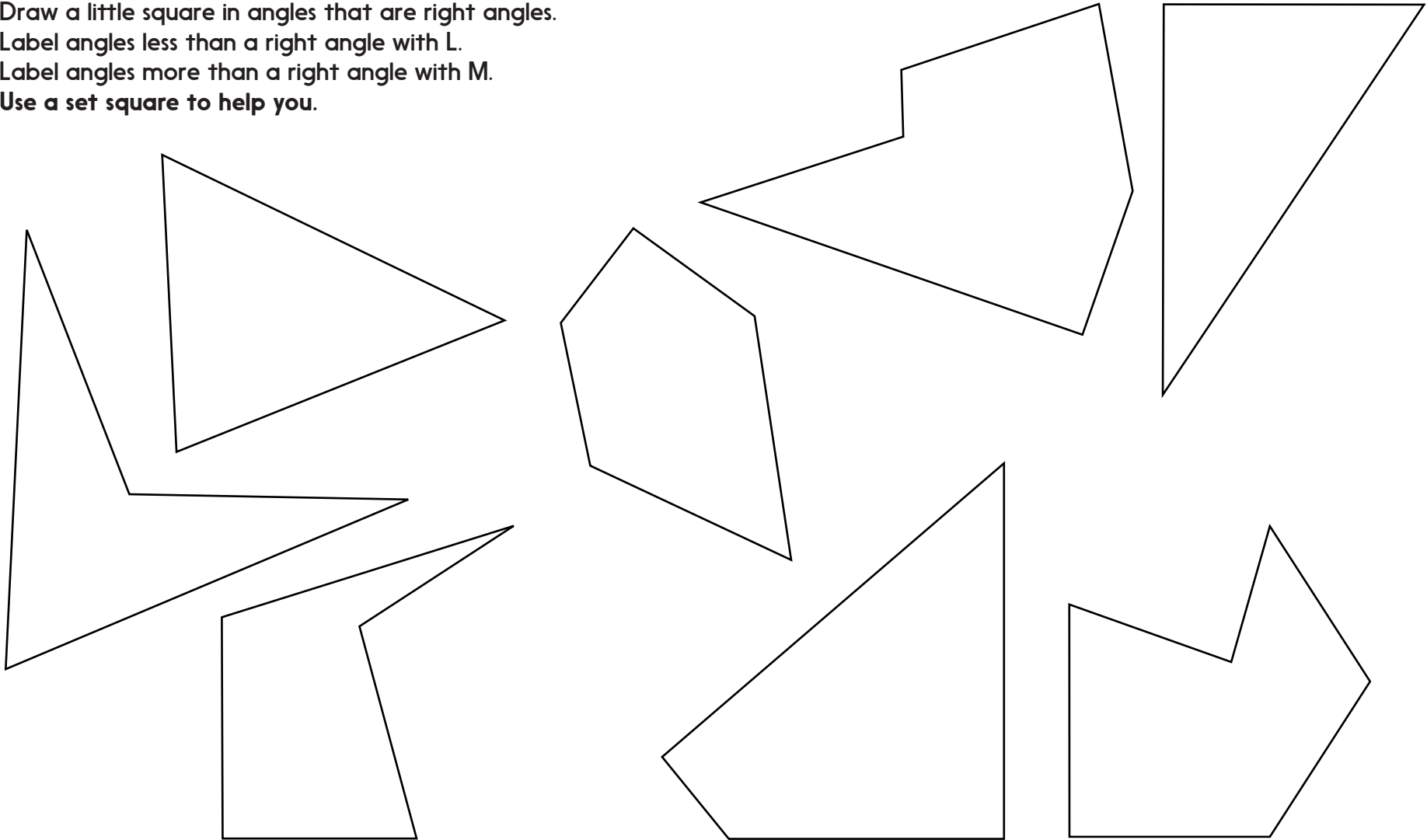
8.



Angles

Sheet 1

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 a set square to help you.



Angles in quadrilaterals

Sheet 2

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

Fill in the information for each quadrilateral.

1.

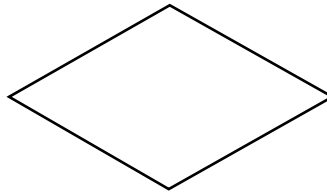


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

2.



Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

3.

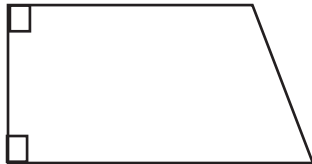


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

4.

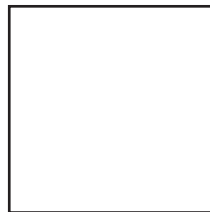


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

5.

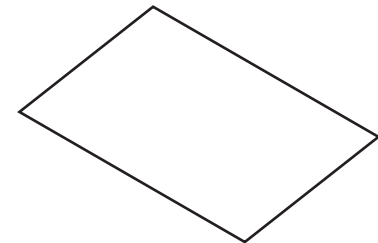


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

6.



Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

Angles in quadrilaterals

Sheet 3

Colour acute angles red. Colour obtuse angles blue. Mark right angles with a square.
Write the name of each type of quadrilateral and fill in the information.

1.



Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

2.

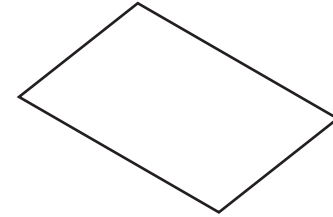


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

3.

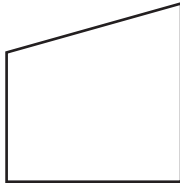


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

4.

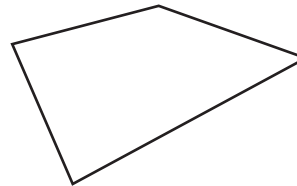


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

5.

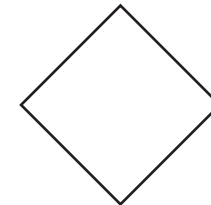


Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

6.



Number of acute angles: _____

Number of obtuse angles: _____

Number of right angles: _____

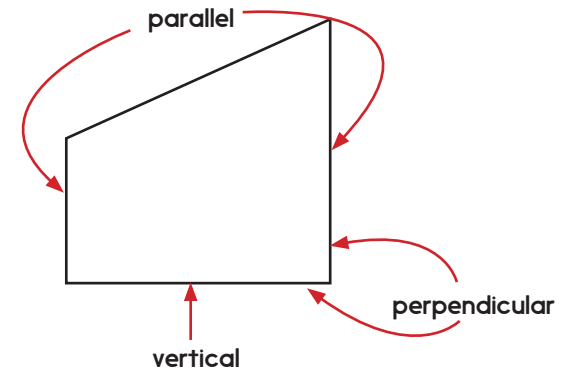
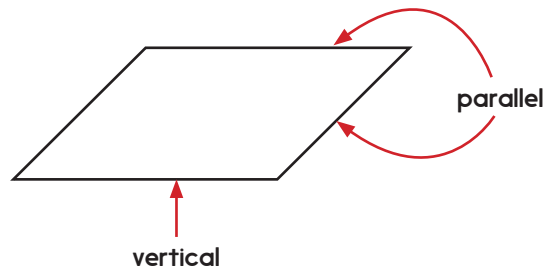
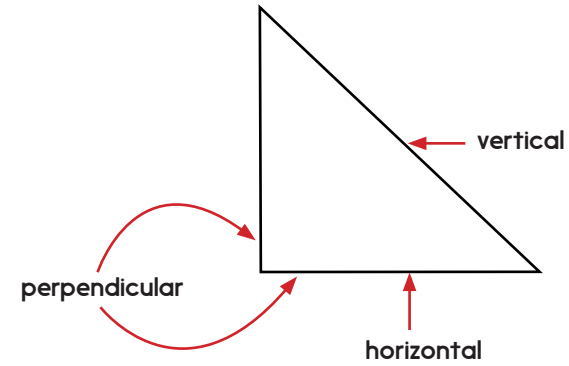
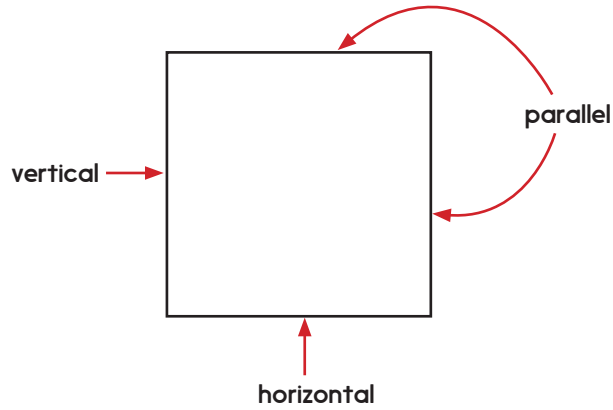
Challenge

Can you draw a quadrilateral with one right angle, two obtuse angles and one acute angle?

Vertical, horizontal, perpendicular and parallel lines

Sheet 1

Draw a tick or cross by each label.

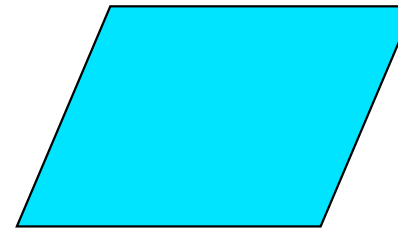
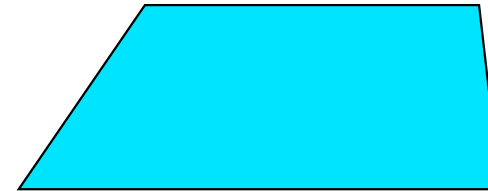
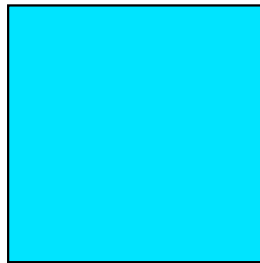
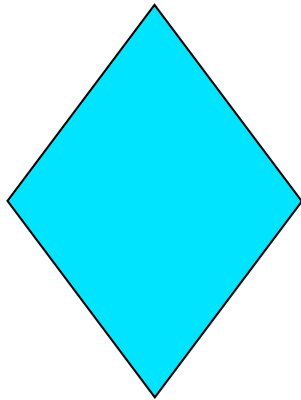


Challenge

Draw your own shape which has horizontal, vertical, perpendicular and parallel lines!

Sorting quadrilaterals

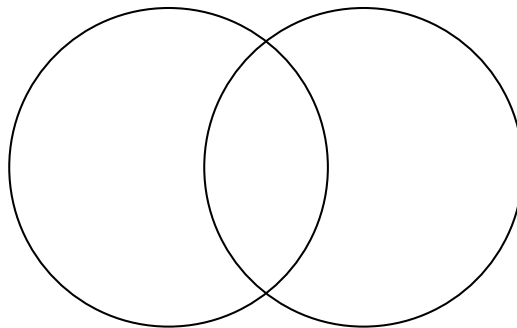
Sheet 2



Cut out the quadrilaterals. Copy the Venn diagram and sort the shapes into the correct places.

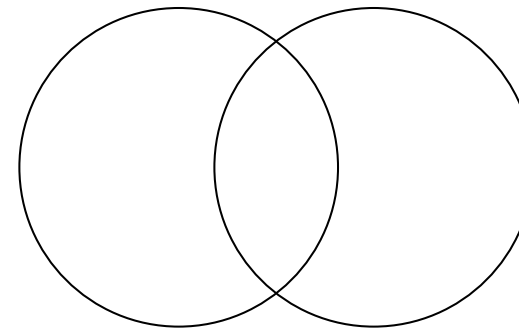
All sides are the same length

Four right angles



Has at least one pair of parallel sides

Symmetrical

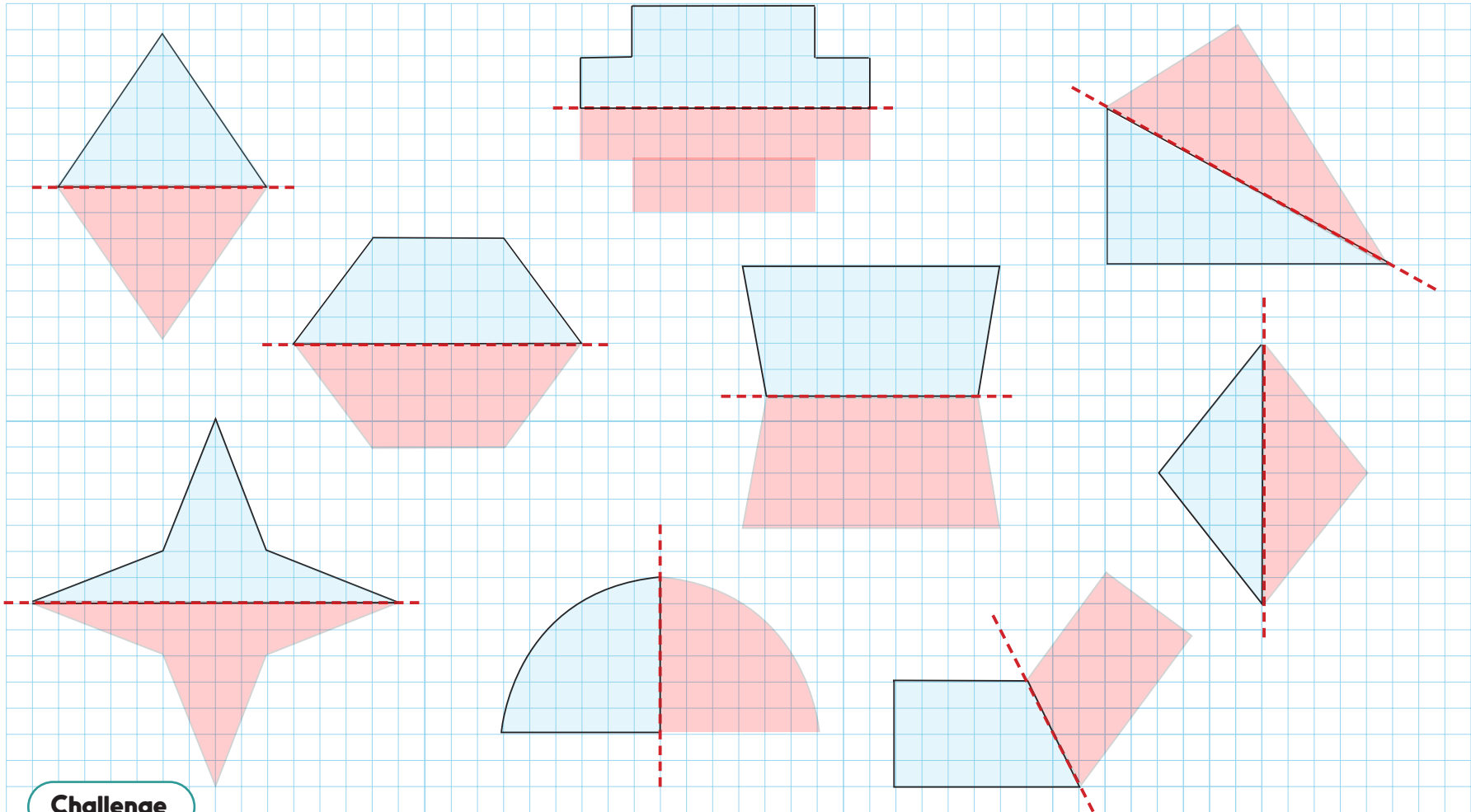


Challenge

Now find your own way to sort the quadrilaterals. Your Venn diagram might even have 3 hoops!

Shape Answers

Day 1 Y3 Symmetrical shapes Sheet 1



Challenge

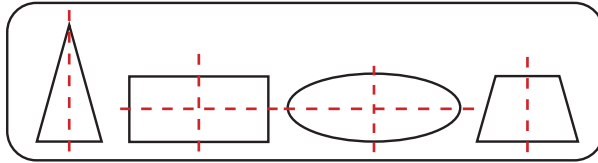
Check that children's drawings are symmetrical across the mirror line they have drawn. If incorrect, use a mirror or a folded piece of tracing paper to help them visualise an accurate reflection.

Shape

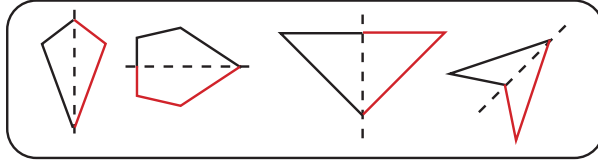
Answers

Day 1 Y4 Symmetrical shapes Sheet 2

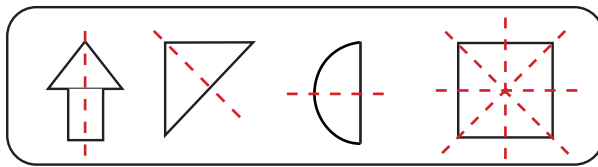
1.



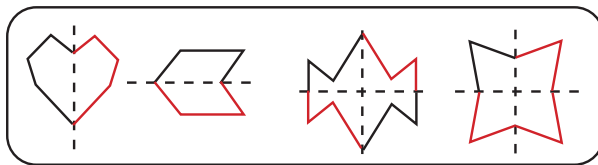
2.



3.

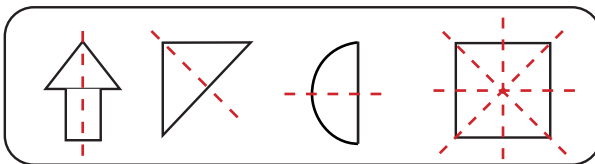


4.

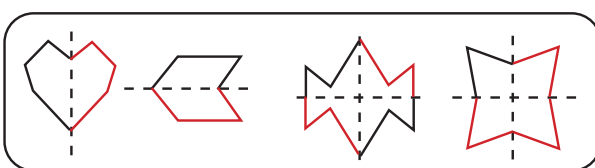


Day 1 Y4 Symmetrical shapes Sheet 3

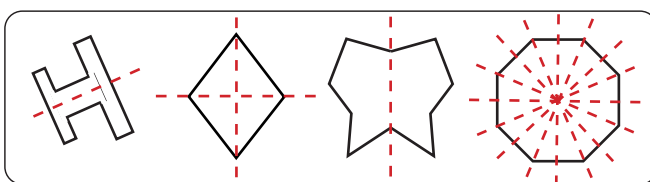
1.



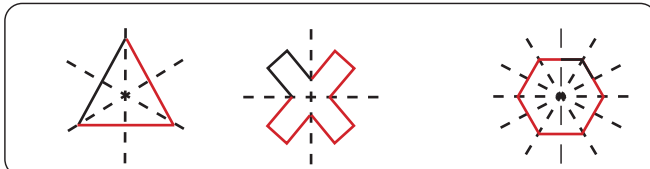
2.



3.



4.



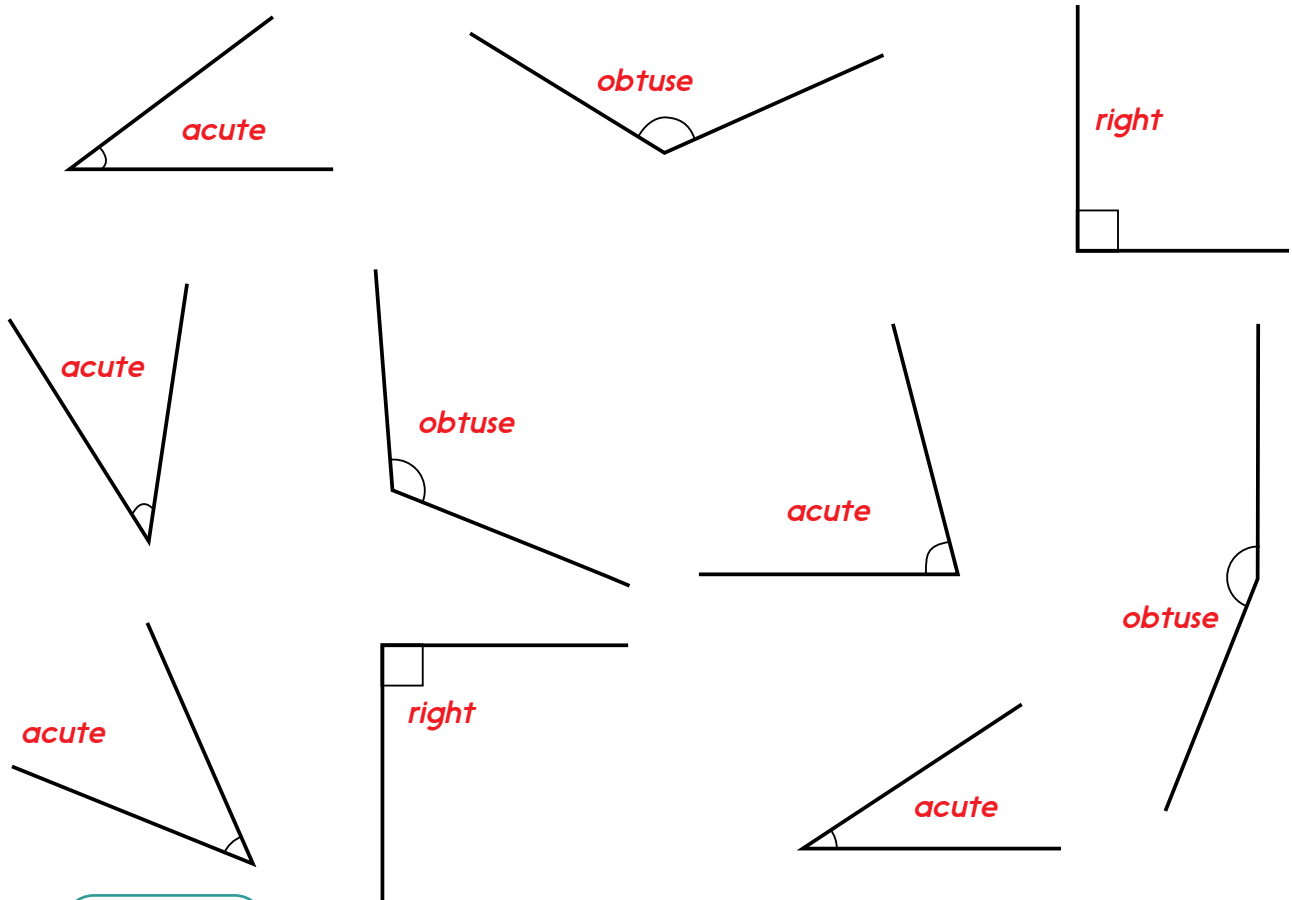
Shape

Answers

Day 2 Y3 Angles and turns Sheet 1

1. $\frac{1}{4}$ spin clockwise. Red
2. $\frac{1}{4}$ spin anticlockwise. Yellow
3. $\frac{1}{2}$ spin clockwise. Blue
4. Two quarter turns clockwise. Blue
5. Three quarter turns clockwise. Yellow
6. Three quarter turns anticlockwise. Red
7. One right angle turn anticlockwise. Yellow
8. Four right angle turns clockwise. Green
9. A 90 degree turn clockwise. Red
10. A 180 degree turn clockwise. Blue

Day 2 Y4 Naming angles Sheet 2



Challenge

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

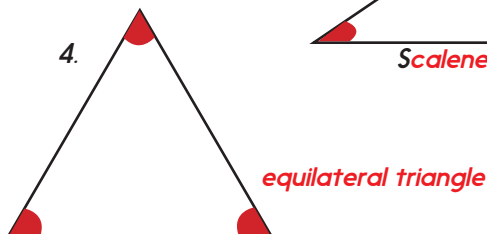
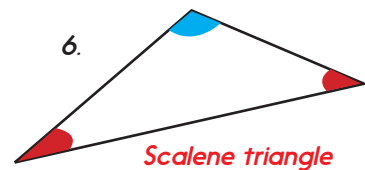
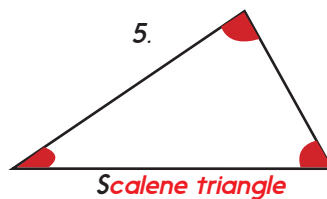
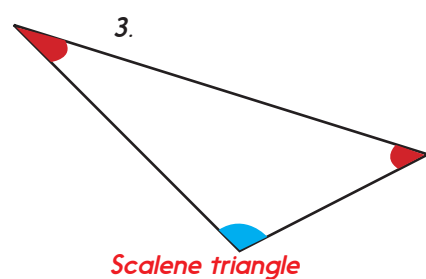
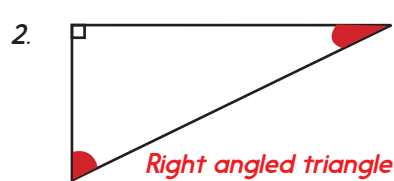
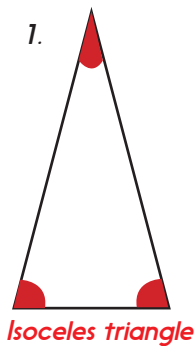
Shape

Answers

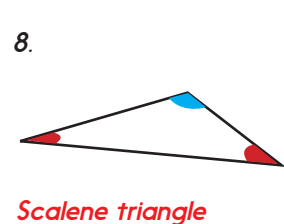
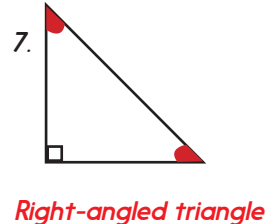
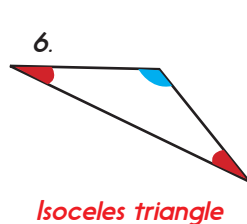
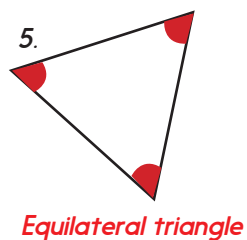
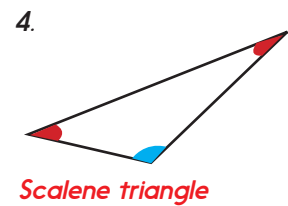
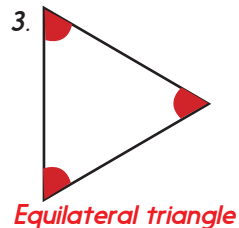
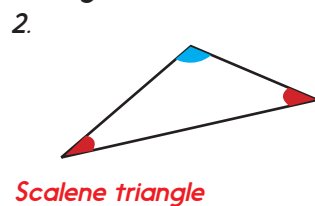
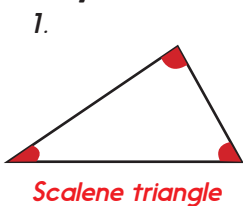
Day 3 Y3 Right angle turns Sheet 1

1. A right angle is 100 degrees. **X**
2. There are four right angle turns in a complete turn. ✓
3. There are three right angle turns in half a turn. **X**
4. There are two right angle turns in a half turn. ✓
5. There are 180 degrees in half a turn. ✓
6. This diver has turned through quarter of a turn. ✓
7. This diver has turned through two right angles turns. ✓
8. This diver has turned through three right angle turns. **X**

Day 3 Y4 Triangles and angles Sheet 2

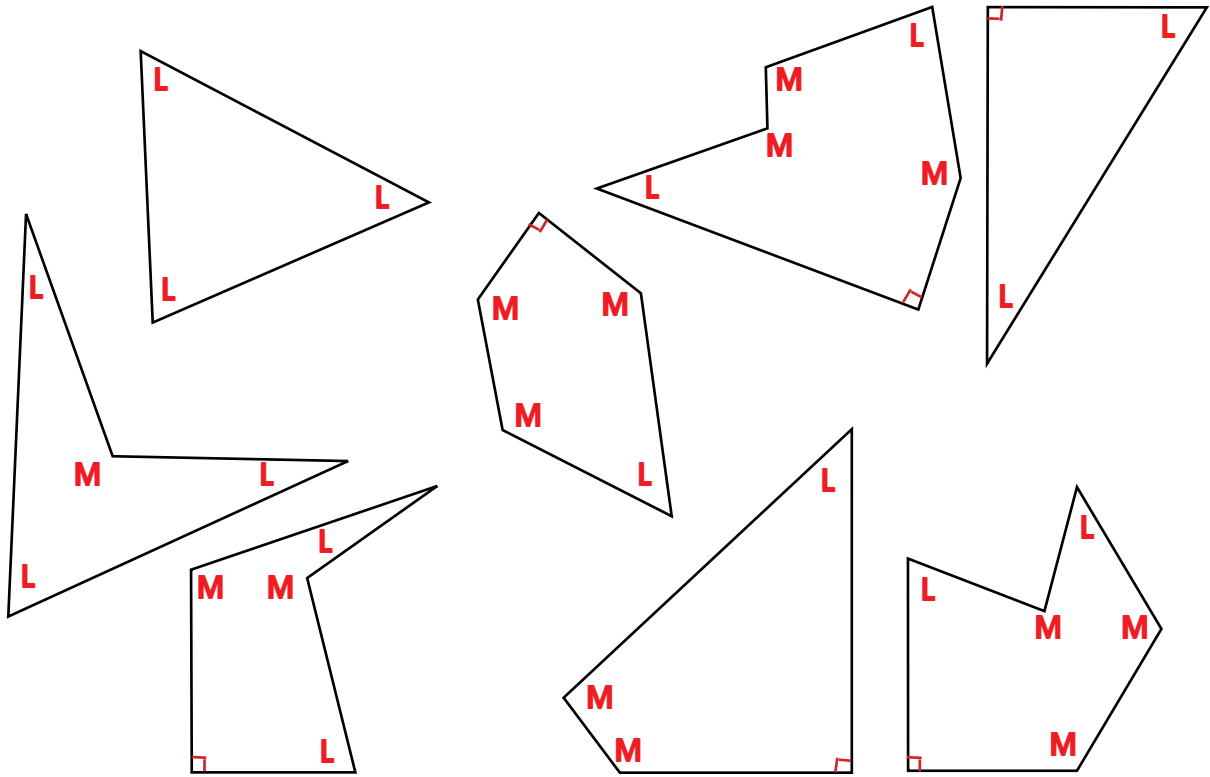


Day 3 Y4 Triangles and angles Sheet 3



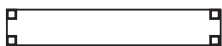
Shape Answers

Day 4 Y3 Angles Sheet 1



Day 4 Y4 Angles in quadrilaterals Sheet 2

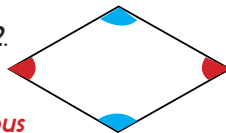
1.



Rectangle

Number of acute angles: 0
 Number of obtuse angles: 0
 Number of right angles: 4

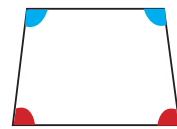
2.



Rhombus

Number of acute angles: 2
 Number of obtuse angles: 2
 Number of right angles: 0

3.



Trapezoid

Number of acute angles: 2
 Number of obtuse angles: 2
 Number of right angles: 0

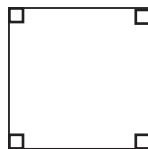
4.



Trapezoid

Number of acute angles: 1
 Number of obtuse angles: 1
 Number of right angles: 2

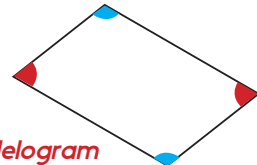
5.



Square

Number of acute angles: 0
 Number of obtuse angles: 0
 Number of right angles: 4

6.



Parallelogram

Number of acute angles: 2
 Number of obtuse angles: 2
 Number of right angles: 0

Shape Answers

Day 4 Y4 Angles in quadrilaterals Sheet 3

1.



Rectangle

Number of acute angles: 0

Number of obtuse angles: 0

Number of right angles: 4

2.



Trapezoid

Number of acute angles: 2

Number of obtuse angles: 2

Number of right angles: 0

3.



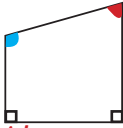
Parallelogram

Number of acute angles: 2

Number of obtuse angles: 2

Number of right angles: 0

4.



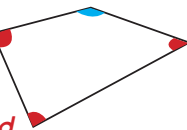
Trapezoid

Number of acute angles: 1

Number of obtuse angles: 1

Number of right angles: 2

5.



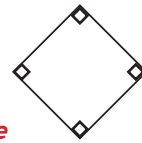
Trapezoid

Number of acute angles: 3

Number of obtuse angles: 1

Number of right angles: 0

6.



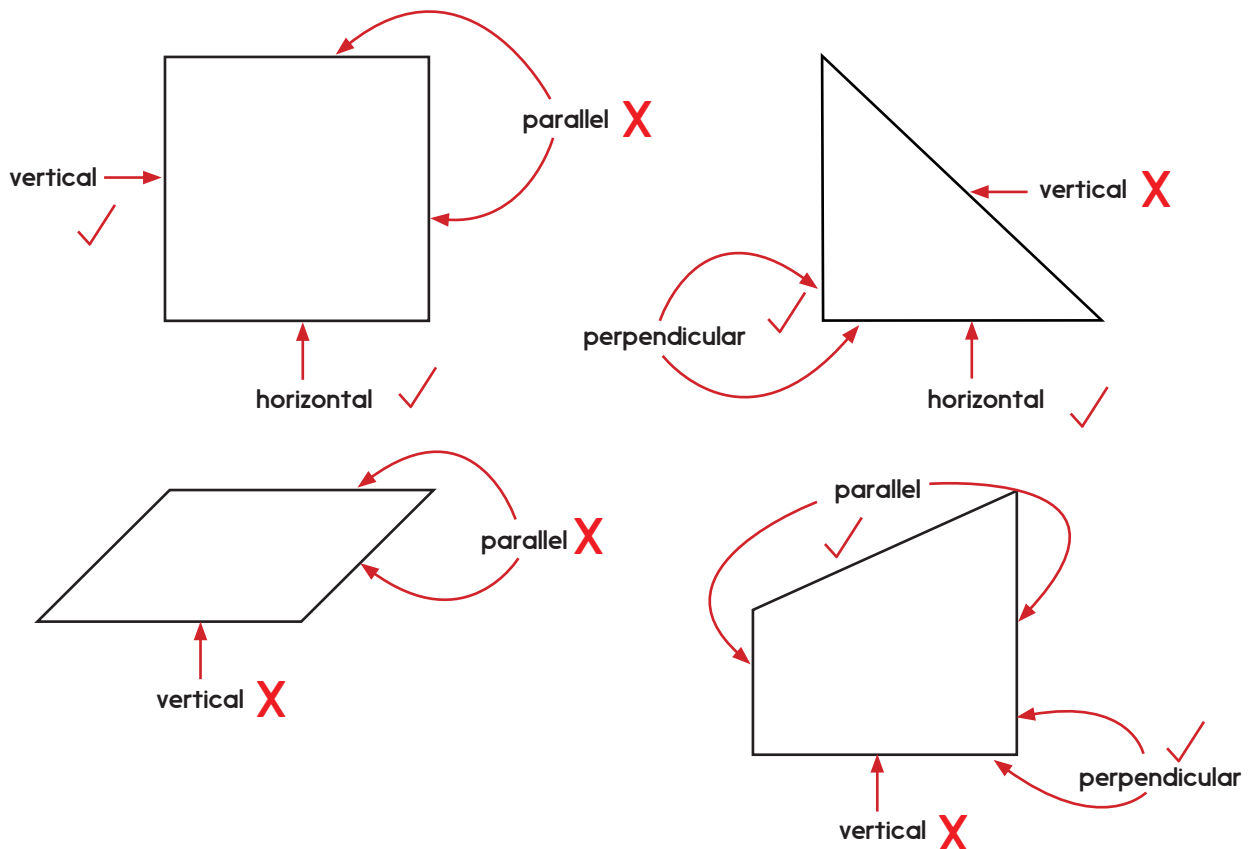
Square

Number of acute angles: 0

Number of obtuse angles: 0

Number of right angles: 4

Day 5 Y3 Vertical, horizontal, perpendicular and parallel lines Sheet 1



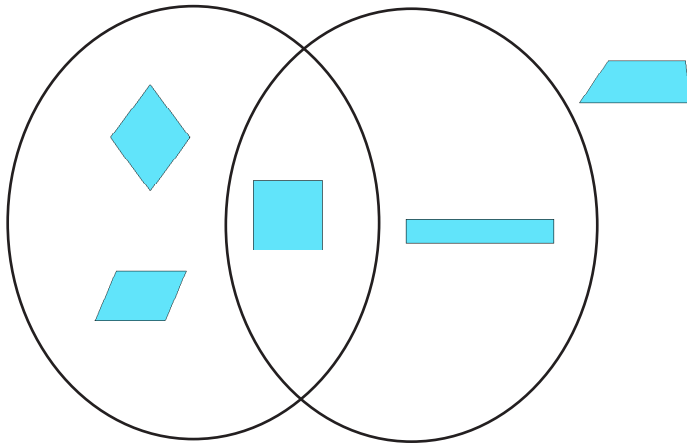
Shape

Answers

Day 5 Y4 Sorting quadrilaterals Sheet 2

All sides are the same length

Four right angles



Has at least one pair of parallel sides

Symmetrical

