

Y6 Drawing 2d Shapes

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Draw a rectangle 6 cm by 4 cm.

Step 1 · Draw a 6 cm line with a ruler, starting at 0
the base

Step 2 · At each end, use a protractor (or set square) to mark 90°
two right angles

Step 3 · Draw 4 cm lines up from each end and join the tops
the top side should measure 6 cm

Answer: A 6 cm × 4 cm rectangle with four right angles

Check: Measure the diagonals: they should be equal ✓

2. Now try one with the steps

Draw a triangle with a base of 7 cm and angles of 50° and 60° at the ends of the base.

Step 1 · Draw the 7 cm base

Step 2 · At A, measure 50° with the protractor and draw a long line

Step 3 · At B, measure 60° and draw a long line

Step 4 · Where the lines cross is the third corner

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. Draw a triangle with base 8 cm and angles of 50° and 60° at the ends. What should the third angle measure?

2. Draw a rectangle 7 cm by 3 cm. What is its perimeter?

3. Draw a square with sides of 5 cm. What angle is at each corner?
- _____
- _____
4. Draw a triangle with base 6 cm and angles of 60° and 60° at the ends. Measure the other sides. What type of triangle is it?
- _____
- _____
5. Draw a triangle with base 8 cm and angles of 45° at both ends. What is the third angle?
- _____
- _____
6. Can you draw a triangle with angles of 110° and 80° ? Explain.
- _____
- _____
7. Draw a triangle with base 7 cm, a 90° angle at one end and a 30° angle at the other. What is the third angle?
- _____
- _____
8. An isosceles triangle has a 5 cm base and two base angles of 70° . What is the angle at the top?
- _____
- _____
9. Draw a parallelogram with sides 6 cm and 4 cm and one angle of 60° . What are the other three angles?
- _____
- _____
10. Draw a rhombus with sides of 5 cm and one angle of 50° . What are the other three angles?
- _____
- _____
11. Which tool do you need to draw an angle of 35° accurately?
- _____
- _____
12. Ben was asked to draw a 6 cm line. His line measures 5.7 cm. Is it accurate to within 2 mm?
- _____
- _____

13. Draw two 5 cm sides with an angle of 60° between them and join the ends. How long is the third side?

14. Draw a right-angled triangle whose shorter sides are 3 cm and 4 cm. Measure the longest side.

15. Can two triangles with angles 40° , 60° and 80° be different sizes? Explain.

4. Before you hand it in

Reading the wrong scale on the protractor and drawing 130° instead of 50° .

Start from 0 on the line you are measuring from, and count up on that scale. Ask: should it be acute or obtuse?

Measuring from the end of the ruler instead of 0.

Line up the 0 mark with the start of the line.

Drawing short angle arms that do not meet.

Draw the arms long and lightly in pencil, then go over the triangle once the lines cross.