

Y6 Area Volume Nets

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Find the area of a triangle with base 10 cm and perpendicular height 6 cm.

Step 1 · Area = base $\times$ height $\div$ 2

$$10 \times 6 \div 2$$

Step 2 · $10 \times 6 = 60$, then halve

30

Answer: 30 cm²

Check: The surrounding rectangle is 60 cm², and the triangle is half of it ✓

2. Now try one with the steps

A right-angled triangle has shorter sides 8 cm and 5 cm. Find its area.

Step 1 · The two sides at the right angle are the base and height

Step 2 · Halve

Answer:

3. Practice

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

1. Find the area of a triangle with base 12 cm and height 5 cm.

2. Find the area of a triangle with base 8 cm and height 3 cm.

3. Find the area of a triangle with base 10 cm and height 7 cm.

4. A right-angled triangle has shorter sides of 6 cm and 9 cm. Find its area.

5. Find the area of a triangle with base 14 cm and height 4 cm.

6. Find the area of a triangle with base 9 cm and height 6 cm.

7. Find the area of a triangle with base 7 cm and height 5 cm.

8. A triangular sail has a base of 4 m and a height of 2.5 m. Find its area.

9. A triangle has an area of 20 cm^2 and a base of 5 cm. What is its height?

10. A triangle has an area of 36 cm^2 and a height of 9 cm. What is its base?

11. An isosceles triangle has sides 5 cm, 5 cm and 6 cm. Its height from the 6 cm base is 4 cm. Find its area.

12. Two different triangles both have a base of 8 cm and a height of 5 cm. Compare their areas.

13. A 10 cm square is cut along a diagonal. What is the area of each triangle?

14. A triangular flower bed has a base of 12 m and a height of 7 m. Turf costs £3 per m^2 . How much does it cost to turf?

15. Explain why the area of a triangle is half of $\text{base} \times \text{height}$.

4. Before you hand it in

Using the slanted side height.

The height is measured at right angles (90°) to the base, often shown dashed line.

Forgetting to halve: base 10, height 6 gives 60 cm^2 .

A triangle is half of a rectangle with the same base and height: $60 \div 2 = 30 \text{ cm}^2$.

Thinking the area changes when the top corner slides along.

If the base and the perpendicular height stay the same, the area stays the same.