

Area of right-angled triangles

Area **C2**

On squared paper, draw a right-angled triangle with these areas. Start by drawing a rectangle.

1 12 cm^2 2 28 cm^2 3 15 cm^2 4 7.5 cm^2

Calculate the area of the side of each wedge.

5. $5 \times 6 = 30$
Area = 15 cm^2

5. Right-angled triangle with vertical side 5 cm and horizontal side 6 cm.

6. Right-angled triangle with vertical side 4 cm and horizontal side 7 cm.

7. Right-angled triangle with vertical side 6.5 cm and horizontal side 8 cm.

8. Right-angled triangle with vertical side 10 cm and horizontal side 12 cm.

9. Right-angled triangle with vertical side 7 cm and horizontal side 9 cm.

10. Right-angled triangle with vertical side 6 cm and horizontal side 13 cm.

Calculate the surface area of each wedge.

11. Wedge with vertical side 5 cm, horizontal side 4 cm, and slanted side 3 cm.

12. Wedge with vertical side 6 cm, horizontal side 8 cm, and slanted side 10 cm.

13. Wedge with vertical side 7 cm, horizontal side 12 cm, and slanted side 13 cm.

Explore

A right-angled triangle has an area of 36 cm^2 .

Investigate possible lengths of its sides which form the right-angle.

Now try this with a triangle with an area of 40 cm^2 .

39

