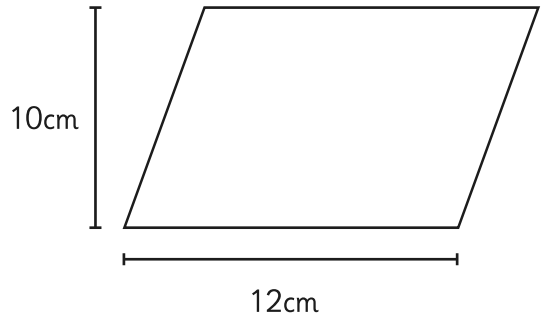
Area of Parallelograms

I can calculate the area of a parallelogram.

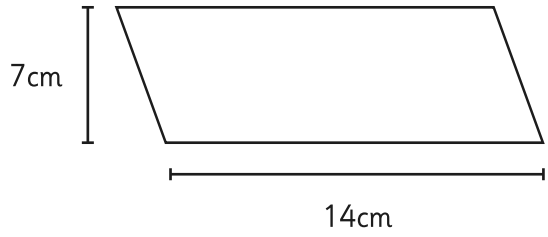
Calculate the **area** of these parallelograms.

1.



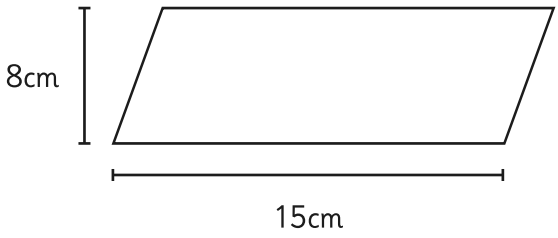
Area =

2.



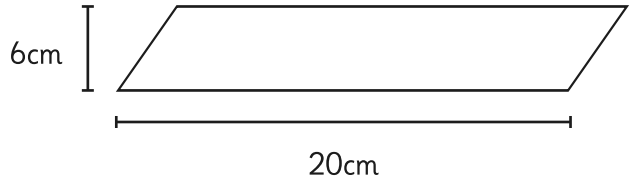
Area =

3.



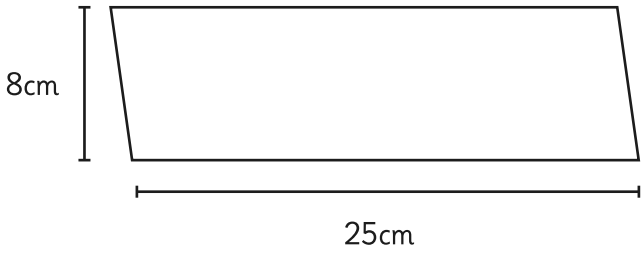
Area =

4.



Area =

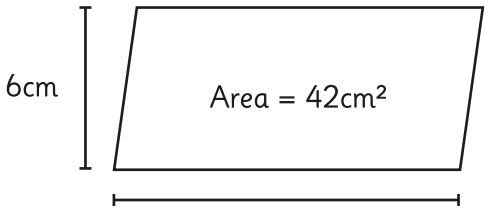
5.



Area =

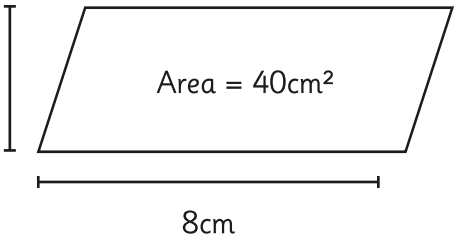
Calculate the missing **base** or **height** of these parallelograms.

6.



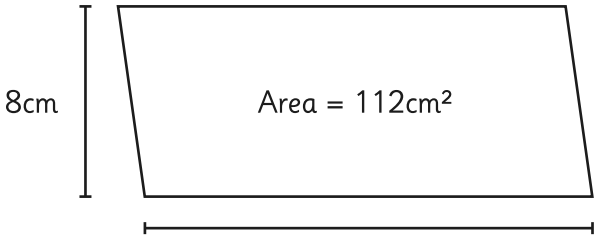
Base =

7.



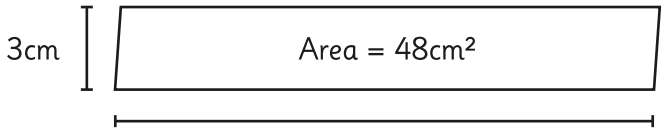
Height =

8.



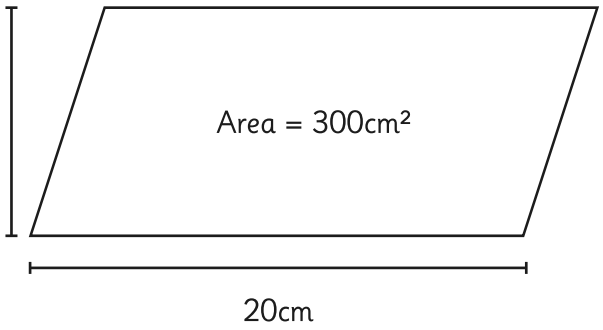
Base =

9.



Base =

10.



Height =

Area of Parallelograms Answers

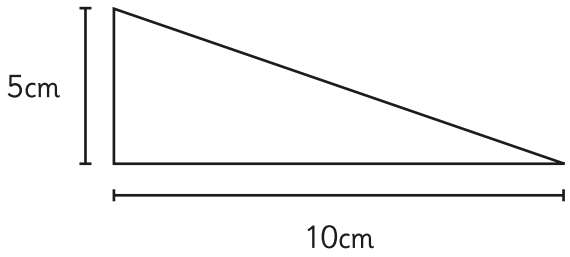
Question	Answer
1	$120cm^2$
2	$98cm^2$
3	$120cm^2$
4	$120cm^2$
5	$200cm^2$
6	7cm
7	5cm
8	14cm
9	16cm
10	15cm

Area of Triangles

I can calculate the area of a triangle.

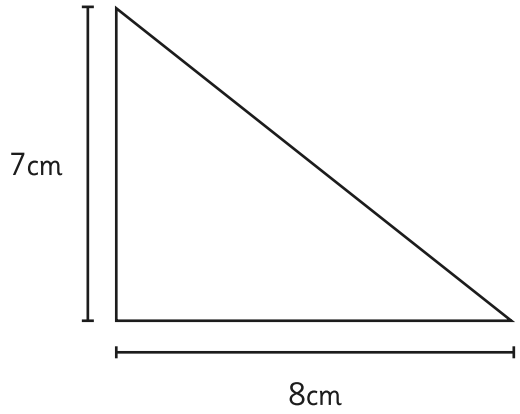
Calculate the **area** of these triangles.

1.



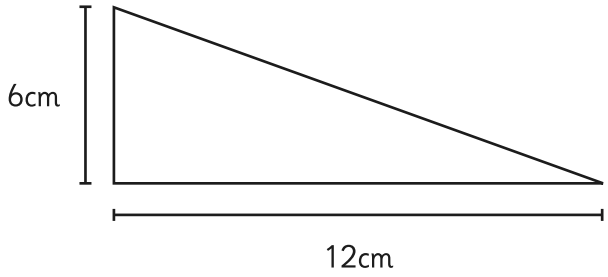
Area =

2.



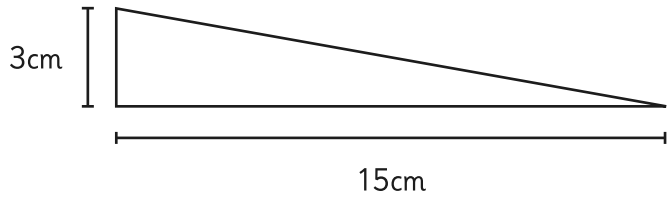
Area =

3.



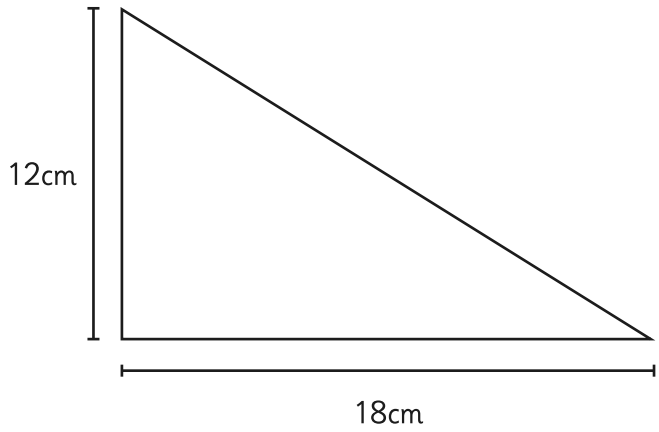
Area =

4.



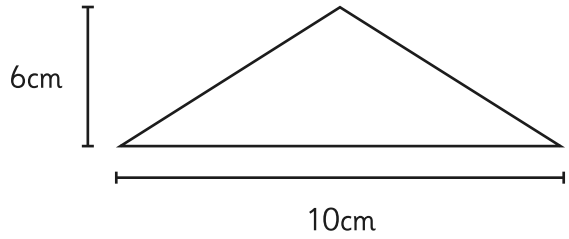
Area =

5.



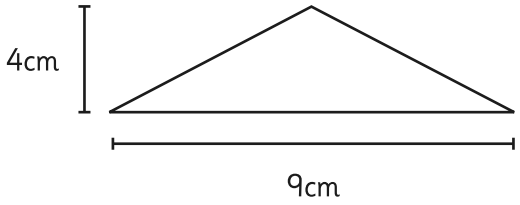
Area =

6.



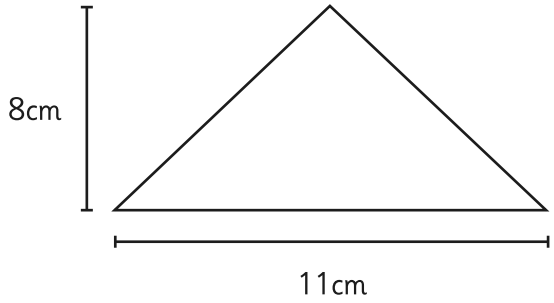
Area =

7.



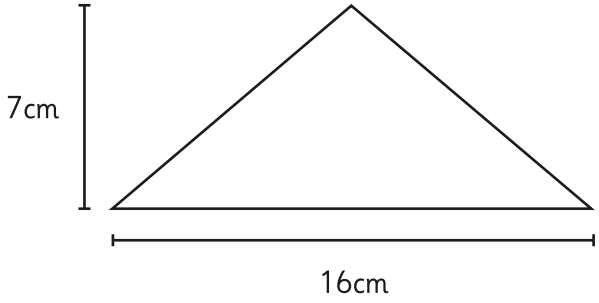
Area =

8.



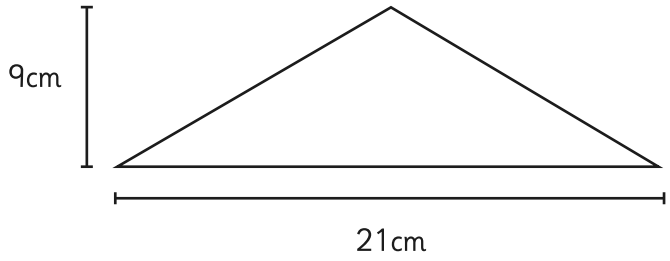
Area =

9.



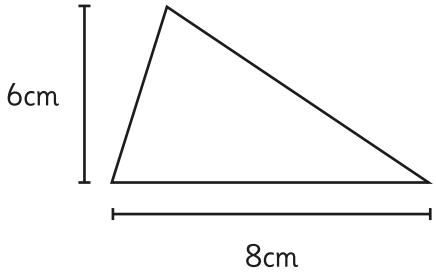
Area =

10.



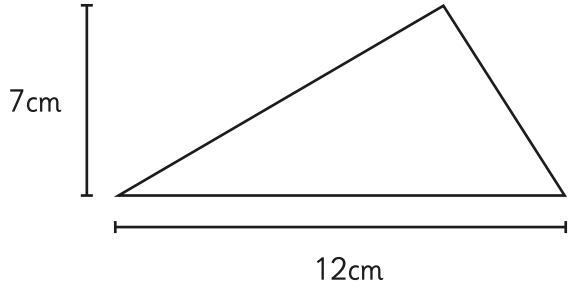
Area =

11.



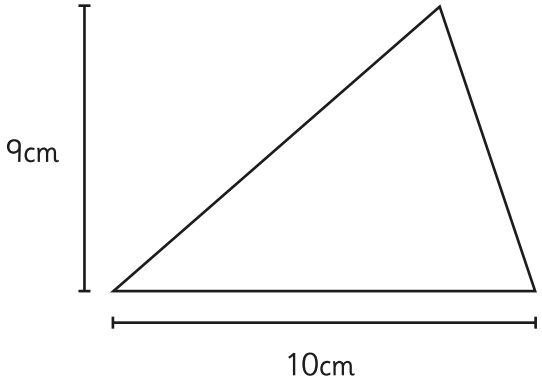
Area =

12.



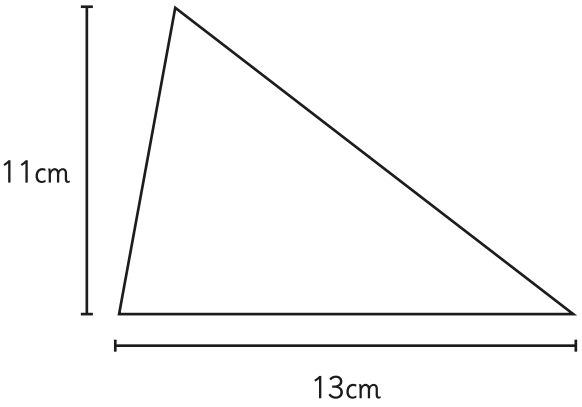
Area =

13.



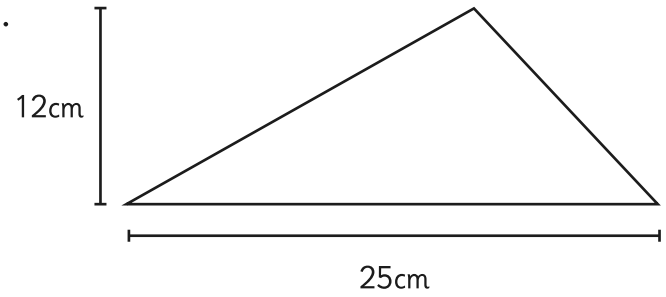
Area =

14.



Area =

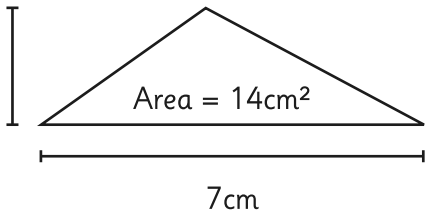
15.



Area =

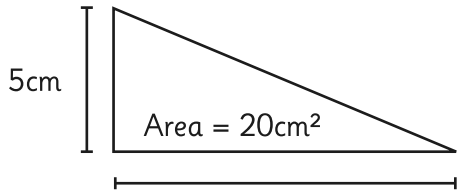
Calculate the missing **base** or **height** of these triangles.

16.



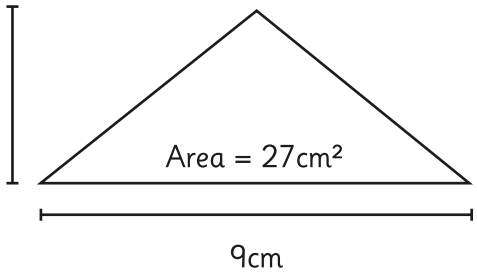
Height =

17.



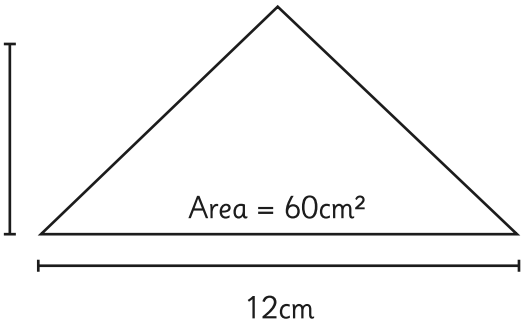
Base =

18.



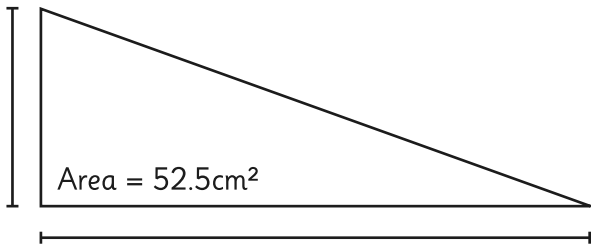
Height =

19.



Height =

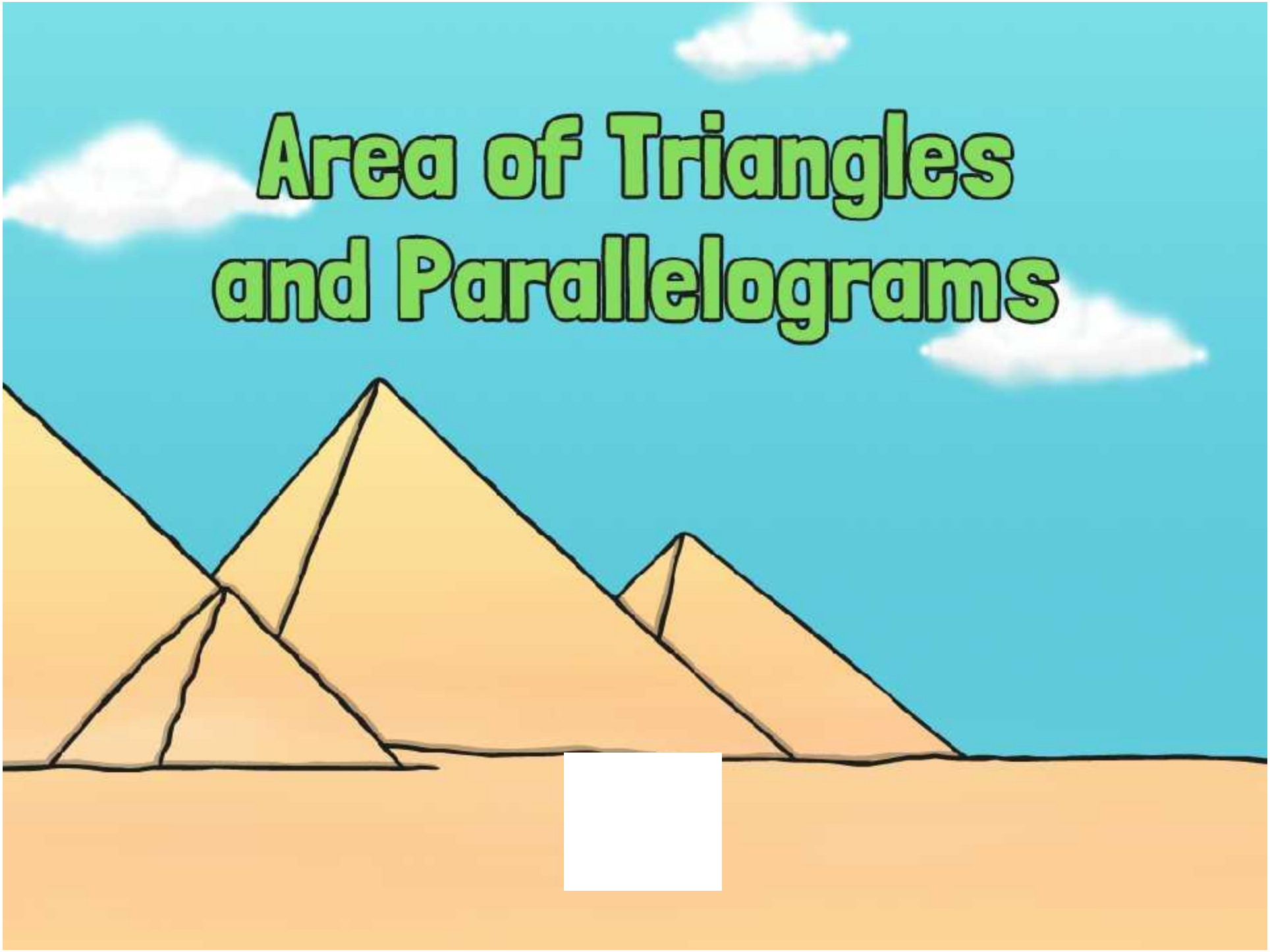
20.



Base =

Area of Triangles Answers

Question	Answer
1	25cm^2
2	28cm^2
3	36cm^2
4	22.5cm^2
5	108cm^2
6	30cm^2
7	18cm^2
8	44cm^2
9	56cm^2
10	94.5cm^2
11	24cm^2
12	42cm^2
13	45cm^2
14	71.5cm^2
15	150cm^2
16	4cm
17	8cm
18	6cm
19	10cm
20	15cm


Area of Triangles
and Parallelograms

Aim

- I can calculate the area of a triangle and a parallelogram.

Success Criteria

- I know the formula for calculating the area of triangles and parallelograms.
- I can understand why these formulas give the area of triangles and parallelograms.
- I can use the formulae to calculate the area of triangles and parallelograms.

The Area of a Triangle

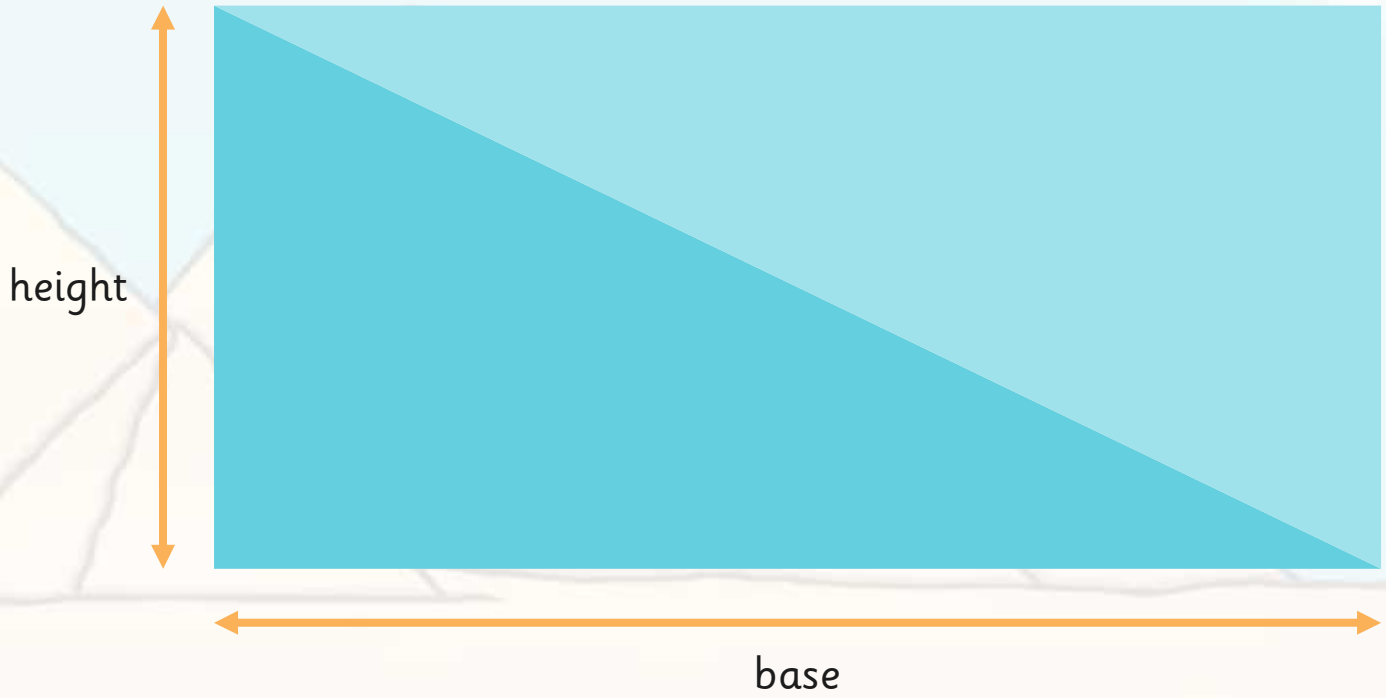
The area of a triangle is based on being half the area of a rectangle.

The Area of a Triangle

The area of a triangle is based on being half the area of a rectangle.

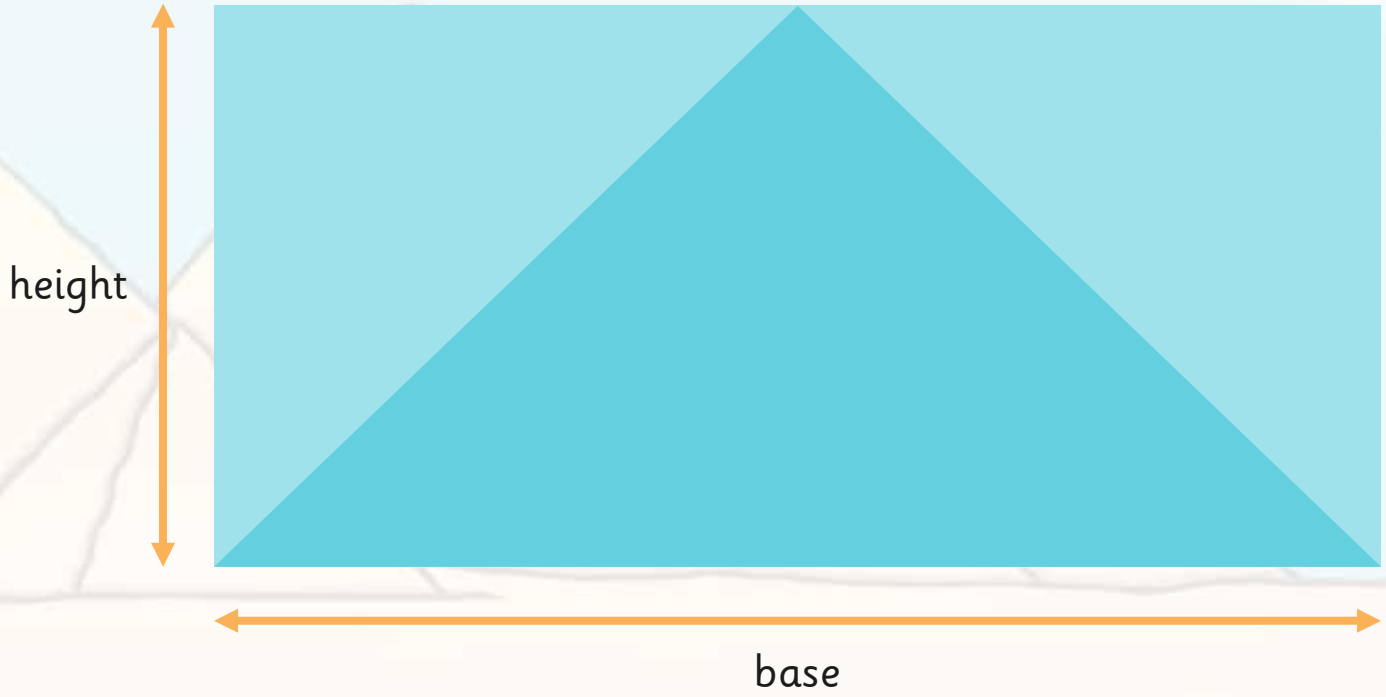
Calculate the Area of a Triangle

Area of a triangle = **half the area of the rectangle**
= **half of the base x height**



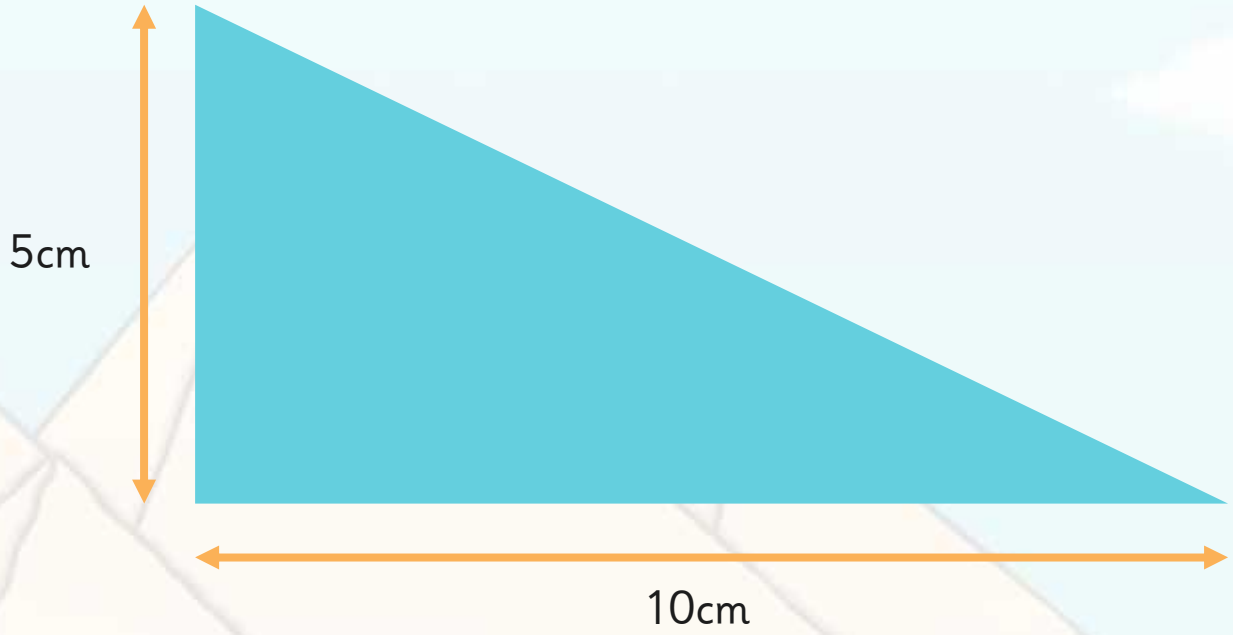
Calculate the Area of a Triangle

Area of a triangle = **half the area of the rectangle**
= **half of the base x height**



Calculate

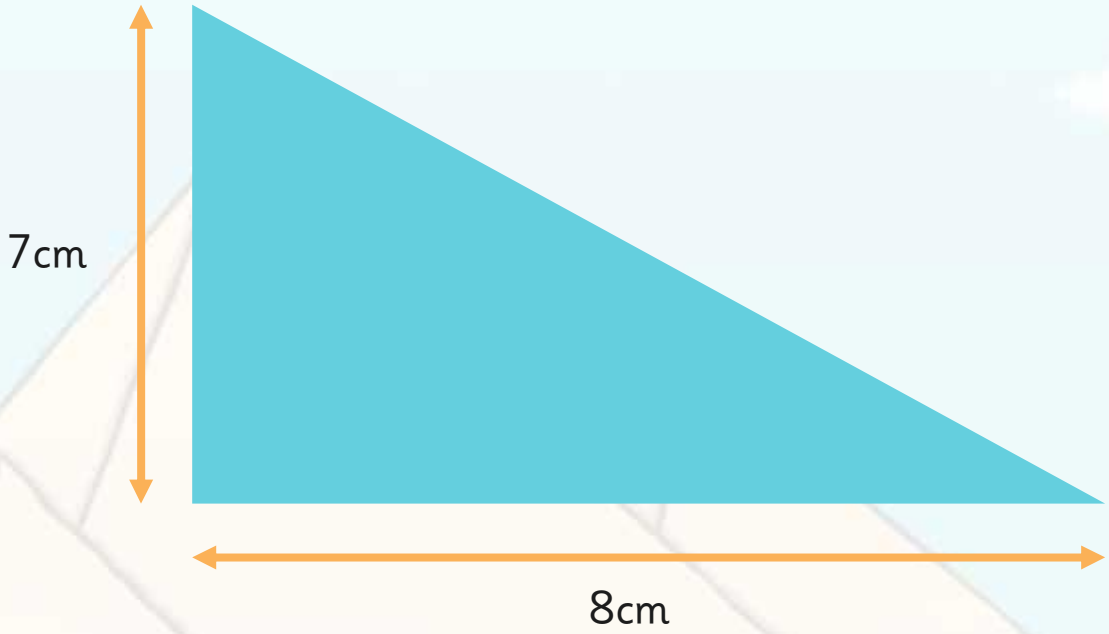
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 10\text{cm} \times 5\text{cm} = 25\text{cm}^2$$

Calculate

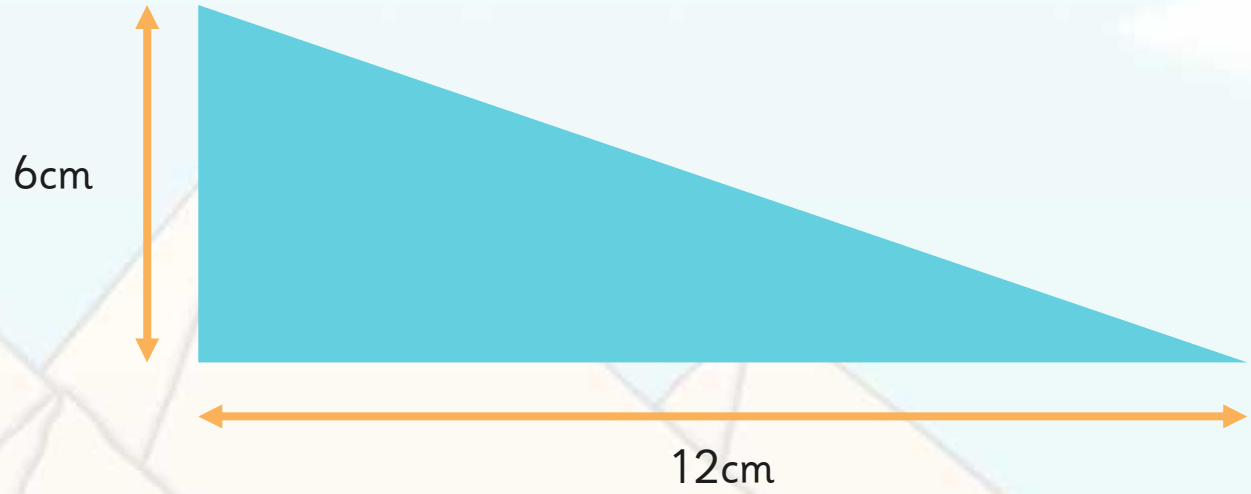
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 8\text{cm} \times 7\text{cm} = 28\text{cm}^2$$

Calculate

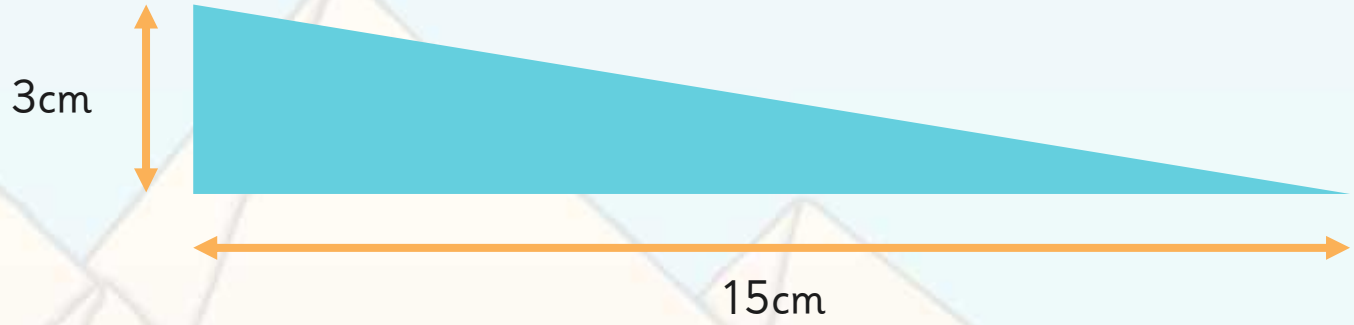
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 12\text{cm} \times 6\text{cm} = 36\text{cm}^2$$

Calculate

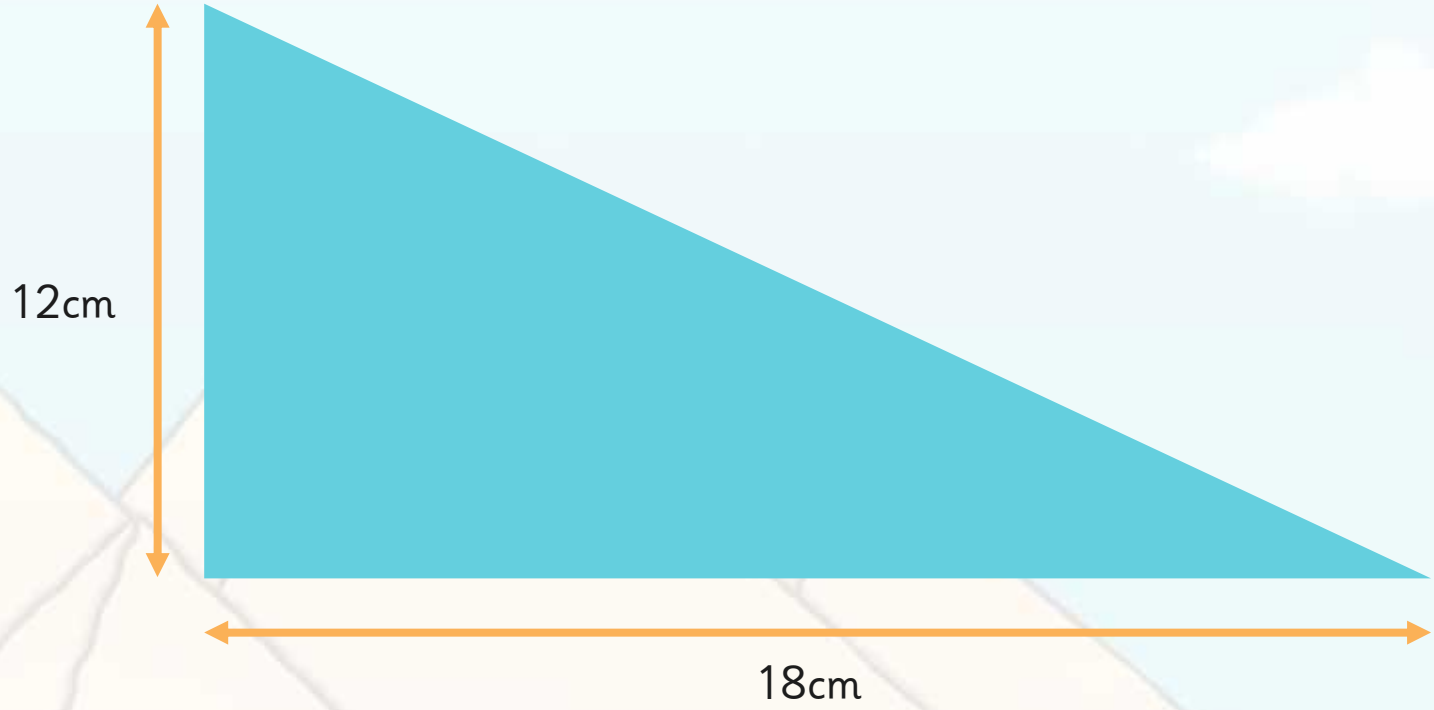
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 15\text{cm} \times 3\text{cm} = 22.5\text{cm}^2$$

Calculate

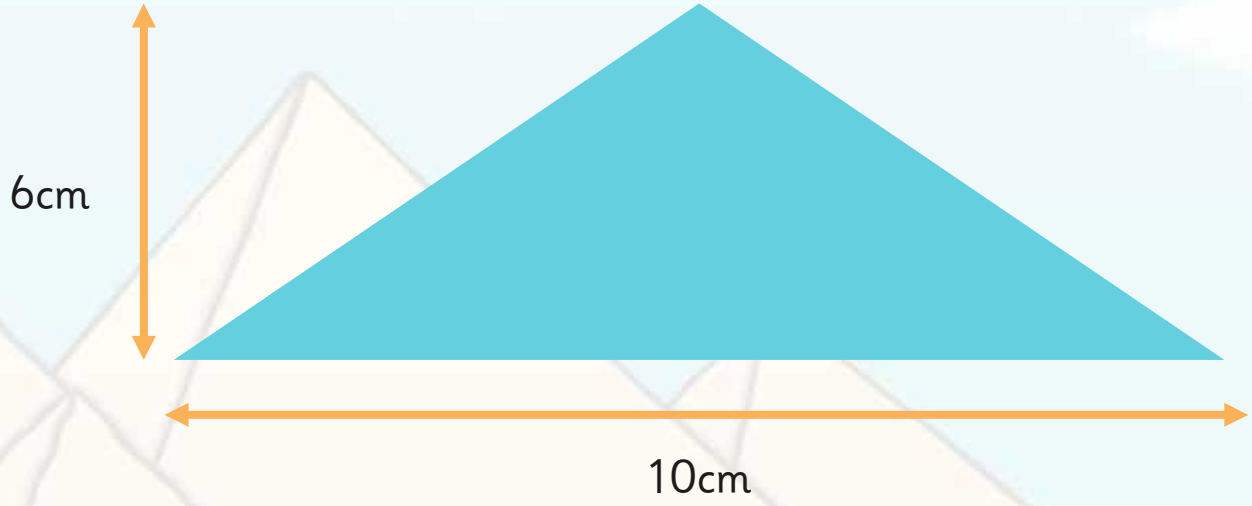
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 18\text{cm} \times 12\text{cm} = 108\text{cm}^2$$

Calculate

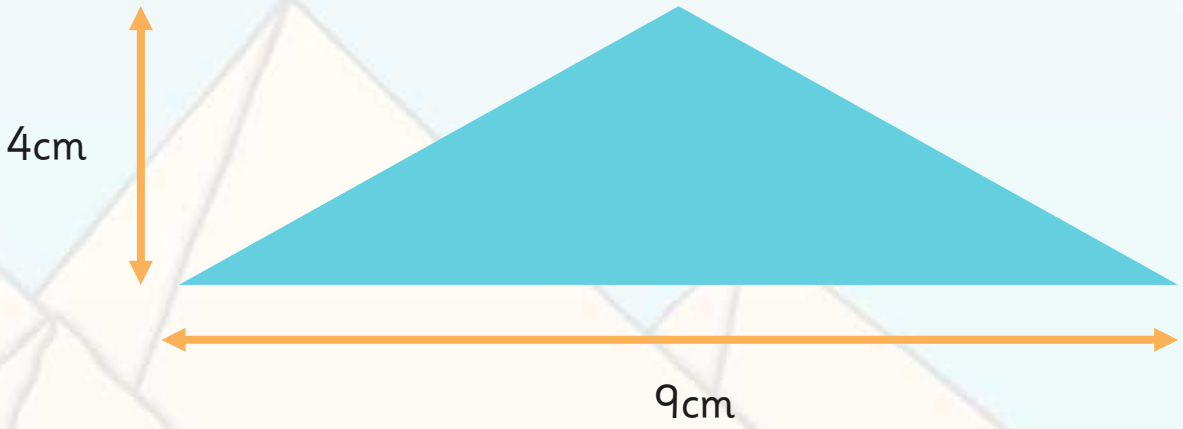
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 10\text{cm} \times 6\text{cm} = 30\text{cm}^2$$

Calculate

Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 9\text{cm} \times 4\text{cm} = 18\text{cm}^2$$

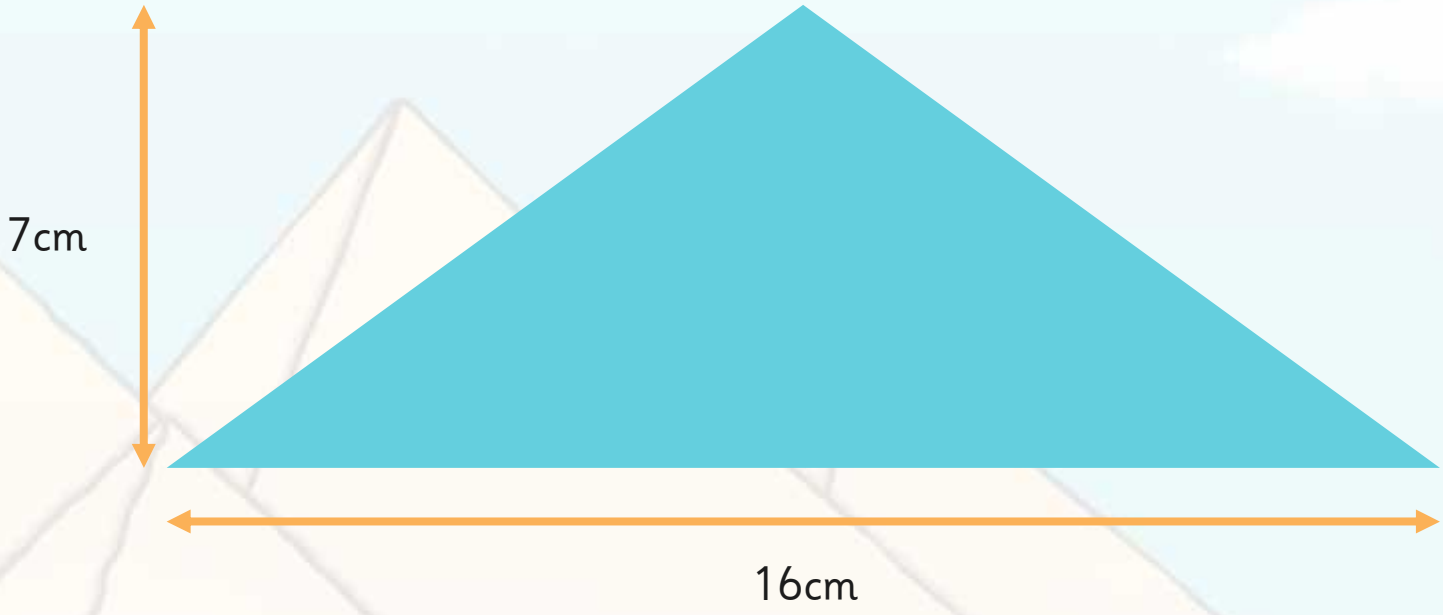
Calculate

Calculate the area of this triangle.

$$\text{Area} = \frac{1}{2} \times 11\text{cm} \times 8\text{cm} = 44\text{cm}^2$$

Calculate

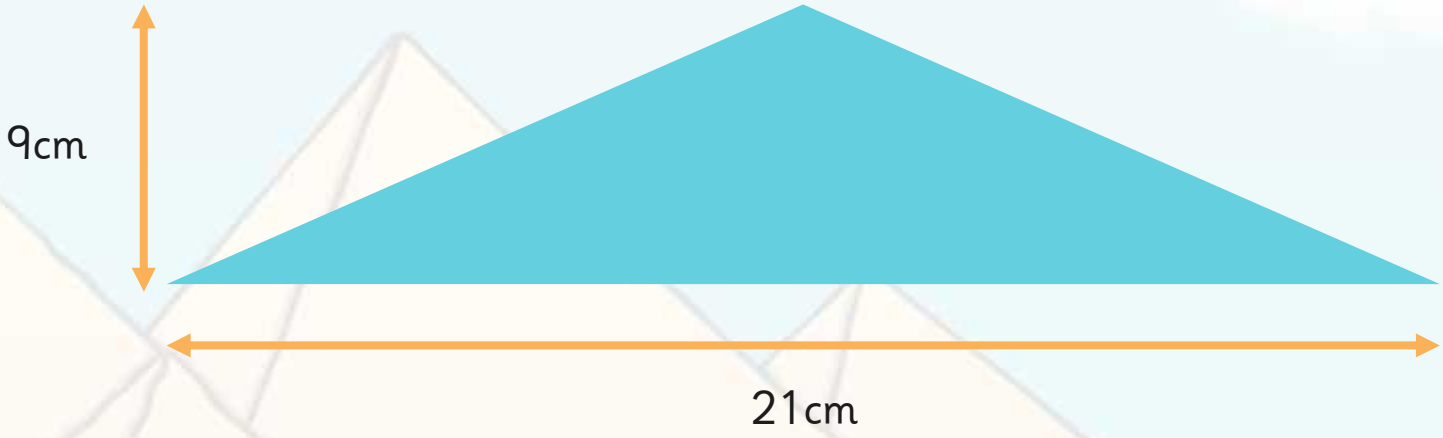
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 16\text{cm} \times 7\text{cm} = 56\text{cm}^2$$

Calculate

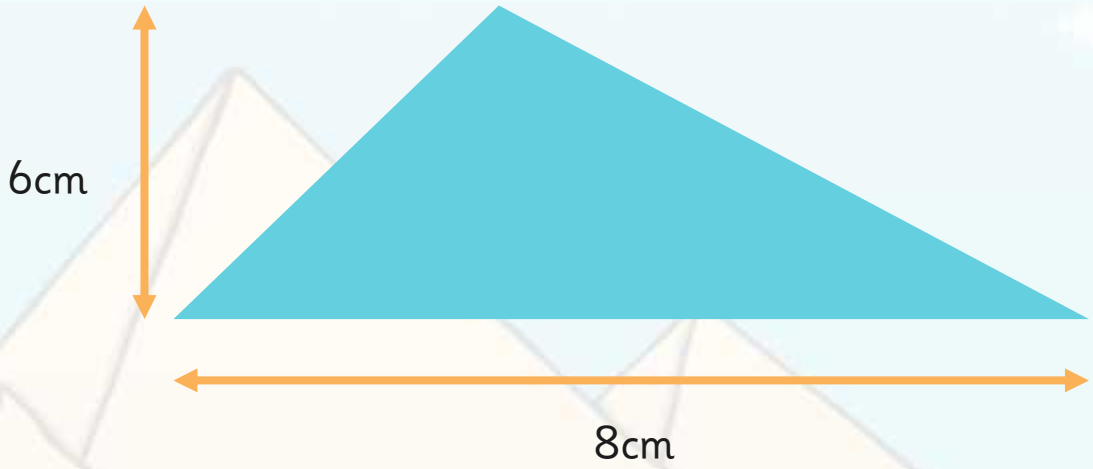
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 21\text{cm} \times 9\text{cm} = 94.5\text{cm}^2$$

Calculate

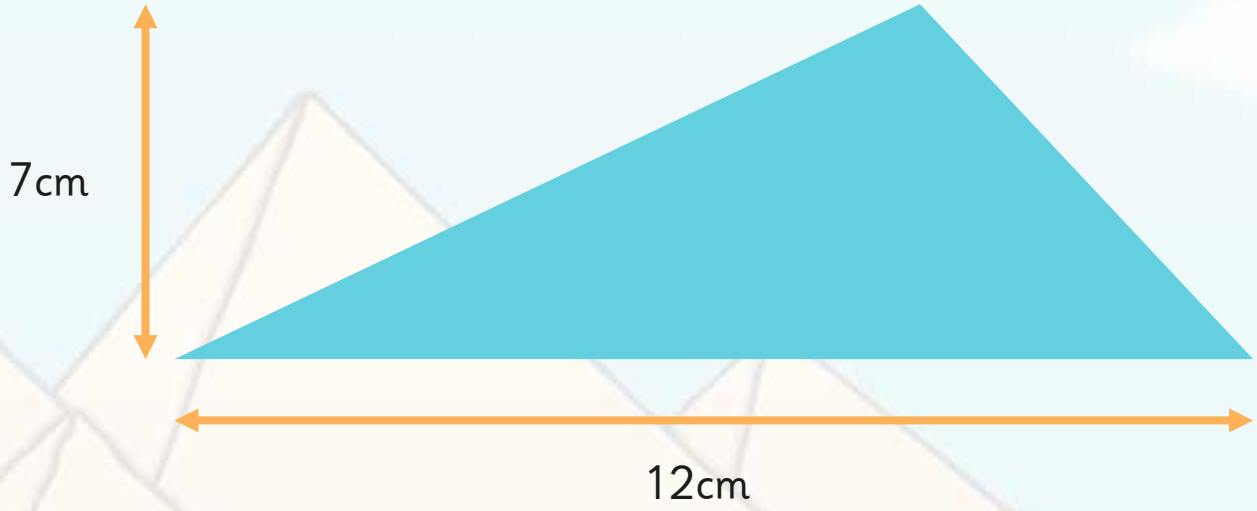
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 8\text{cm} \times 6\text{cm} = 24\text{cm}^2$$

Calculate

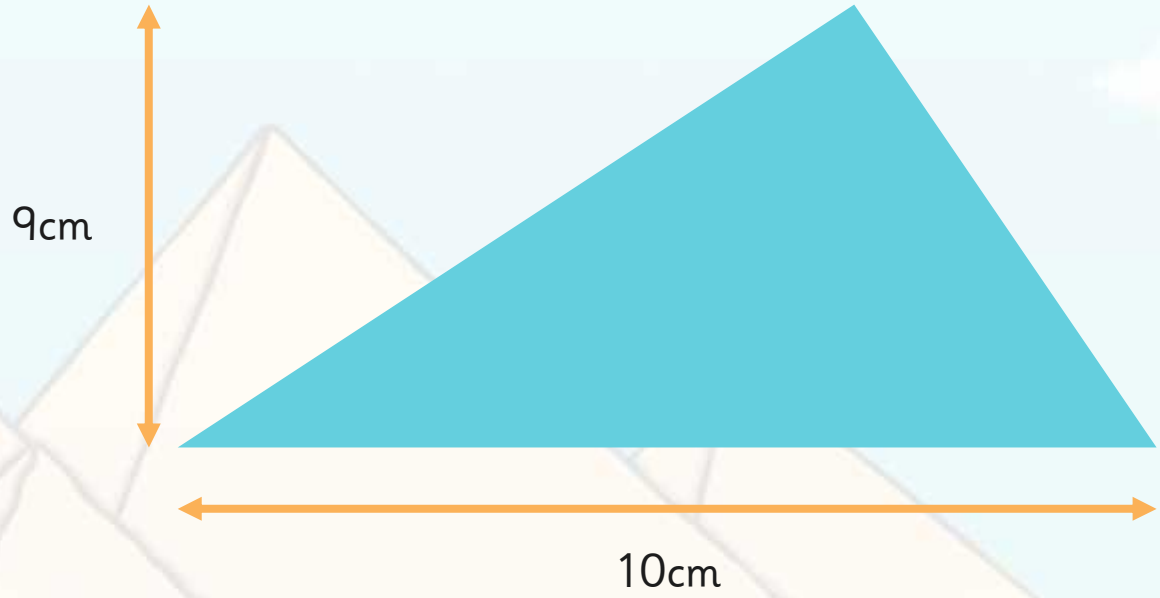
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 12\text{cm} \times 7\text{cm} = 42\text{cm}^2$$

Calculate

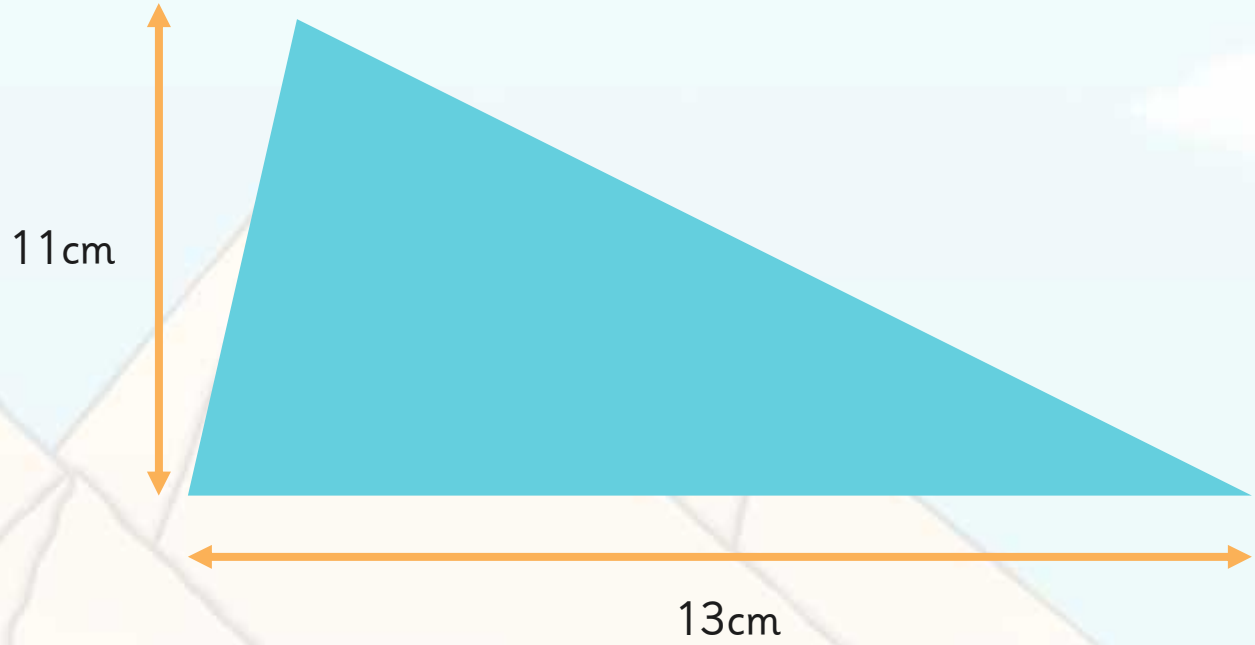
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 10\text{cm} \times 9\text{cm} = 45\text{cm}^2$$

Calculate

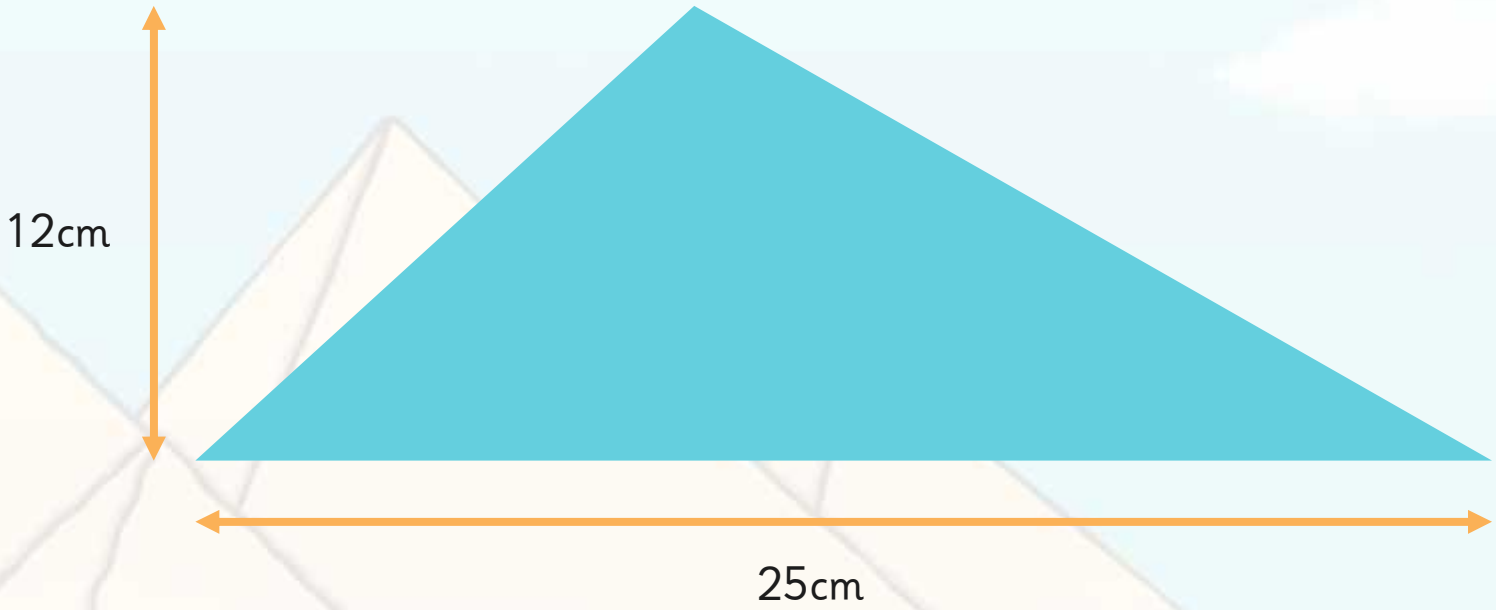
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 13\text{cm} \times 11\text{cm} = 71.5\text{cm}^2$$

Calculate

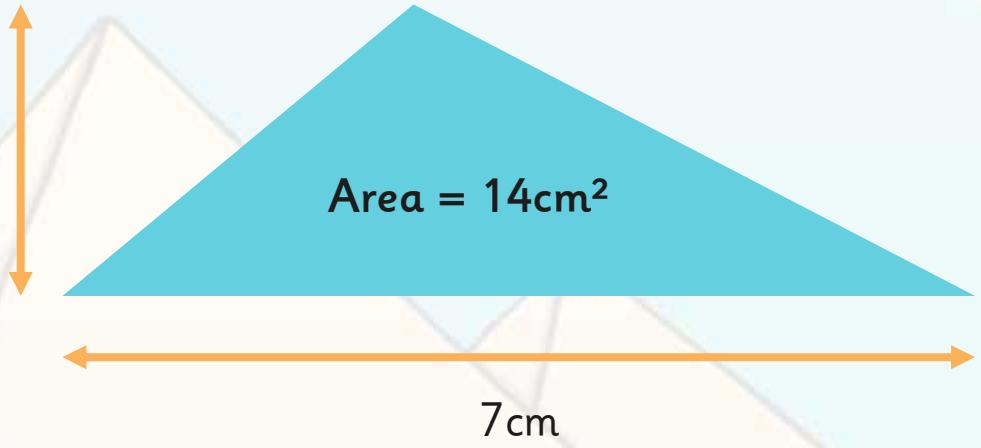
Calculate the area of this triangle.



$$\text{Area} = \frac{1}{2} \times 25\text{cm} \times 12\text{cm} = 150\text{cm}^2$$

Calculate

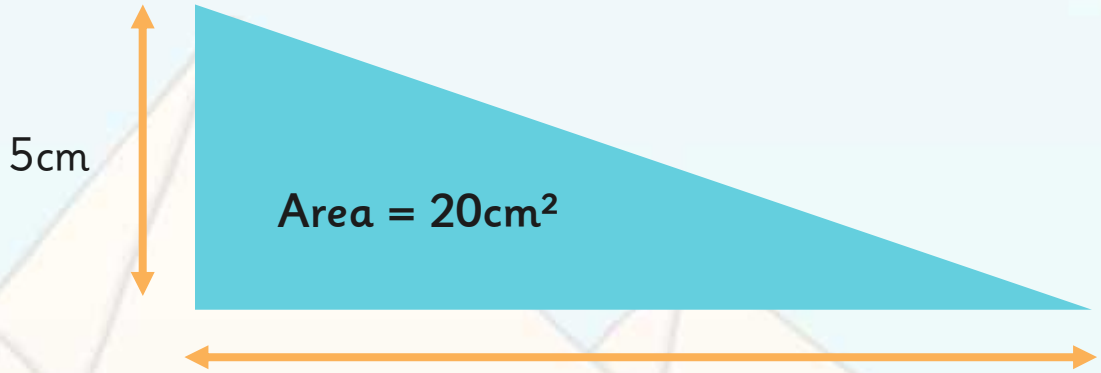
Calculate the **height** of this triangle.



$$\text{Height} = 2 \times \frac{14}{7} = 4\text{cm}$$

Calculate

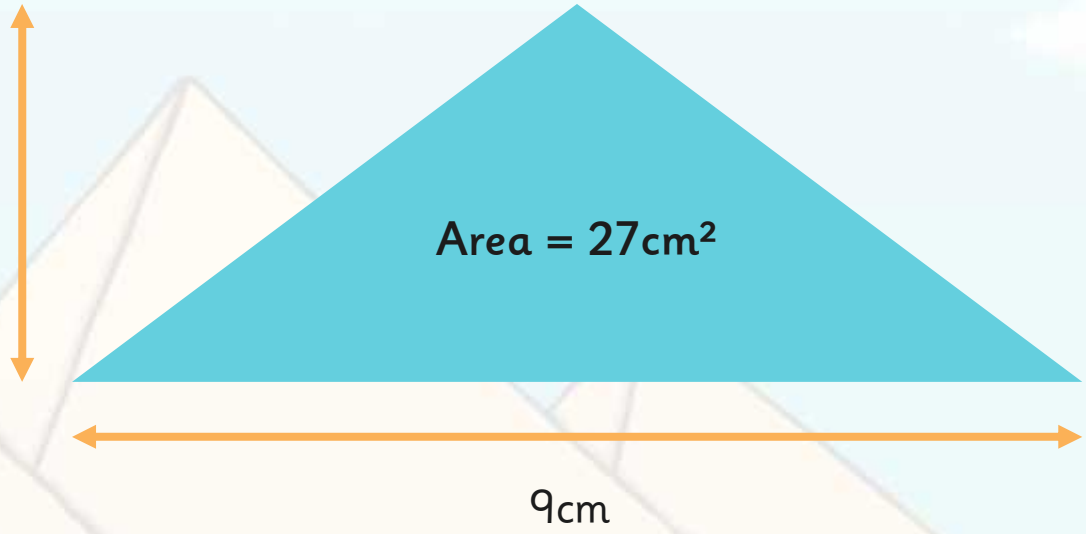
Calculate the **base** of this triangle.



$$\text{Base} = 2 \times \frac{20}{5} = 8\text{cm}$$

Calculate

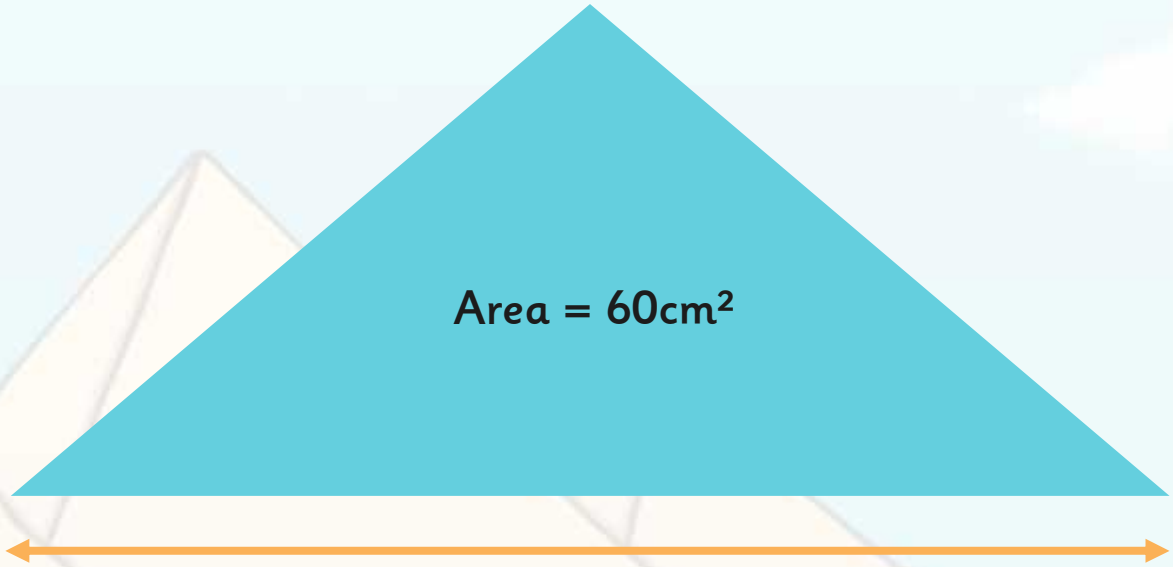
Calculate the **height** of this triangle.



$$\text{Height} = 2 \times \frac{27}{9} = 6\text{cm}$$

Calculate

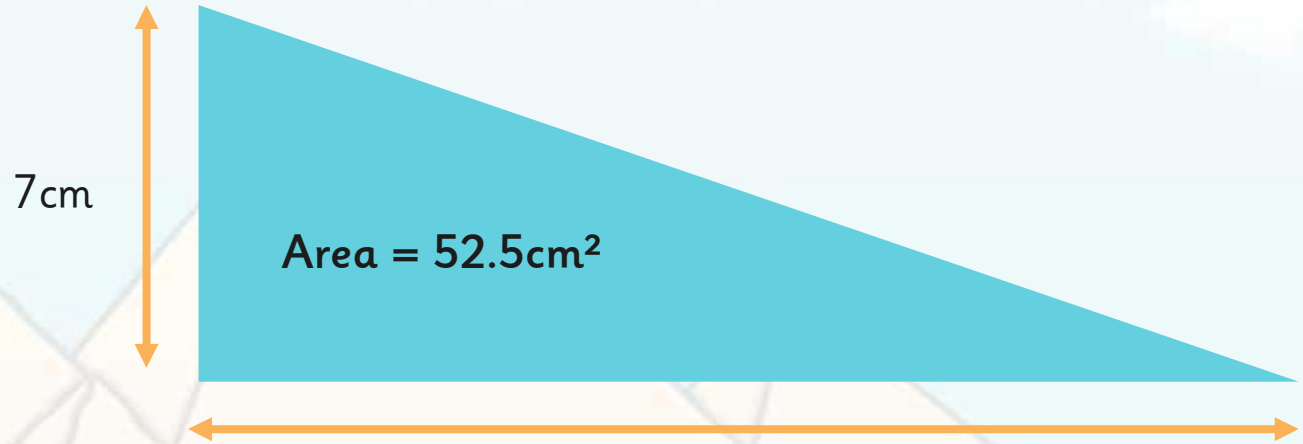
Calculate the **height** of this triangle.



$$\text{Height} = 2 \times \frac{60}{12} = 10\text{cm}$$

Calculate

Calculate the **base** of this triangle.



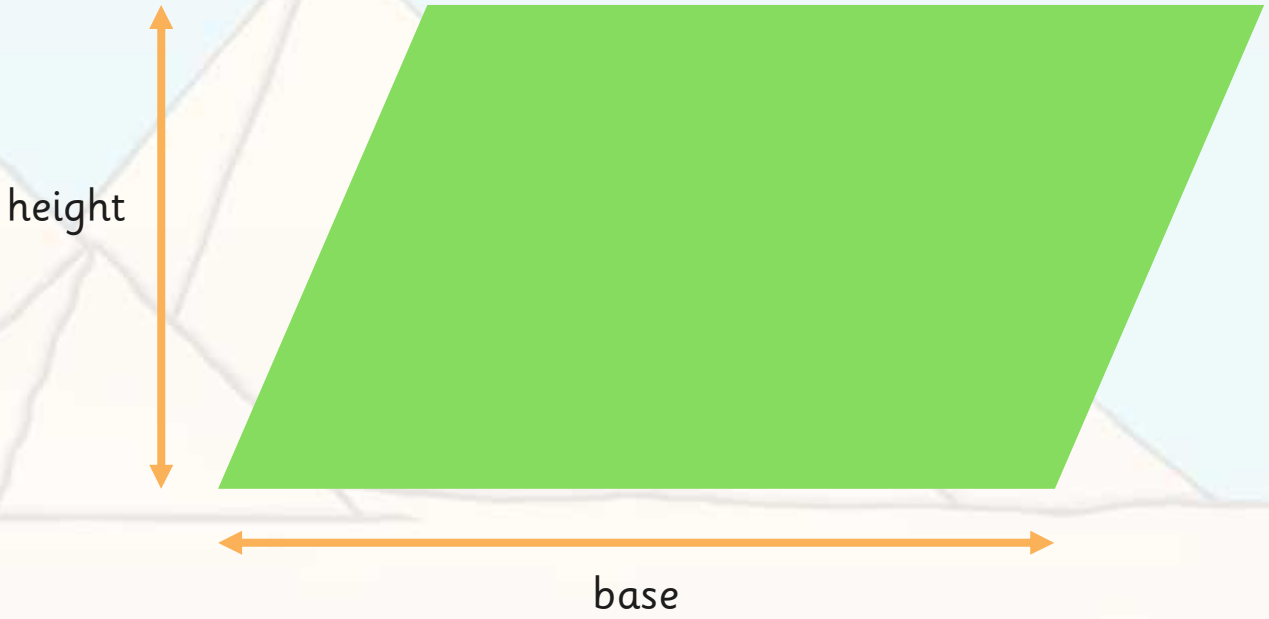
$$\text{Base} = 2 \times \frac{52.5}{7} = 15\text{cm}$$

The Area of a Parallelogram

The area of a parallelogram is based upon the area of a rectangle that can be made by cutting off one end and moving it to make the rectangle.

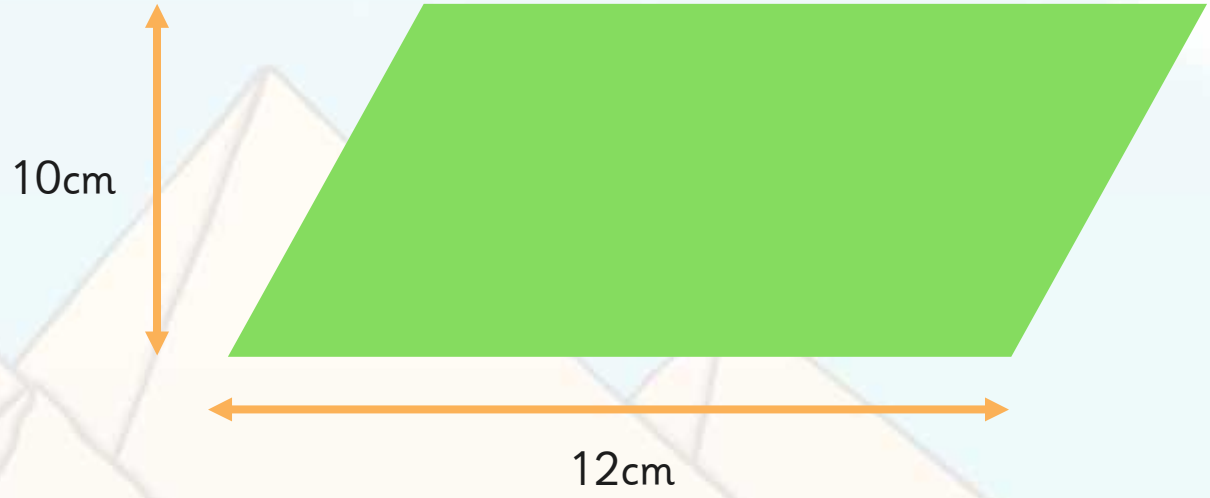
Calculate the Area of a Parallelogram

Area of a parallelogram = **the area of the rectangle**
= base x height



Calculate

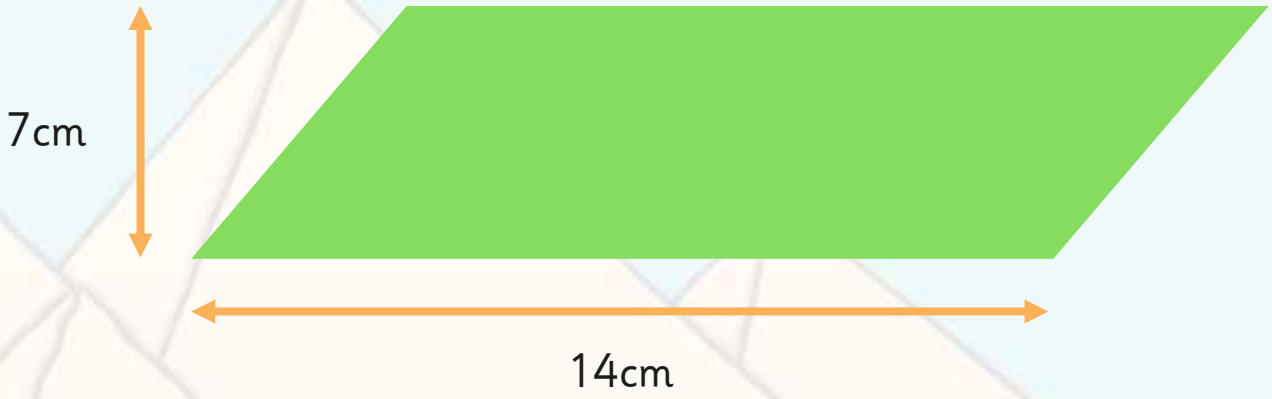
Calculate the area of this parallelogram.



Area = 12cm × 10cm = 120cm²

Calculate

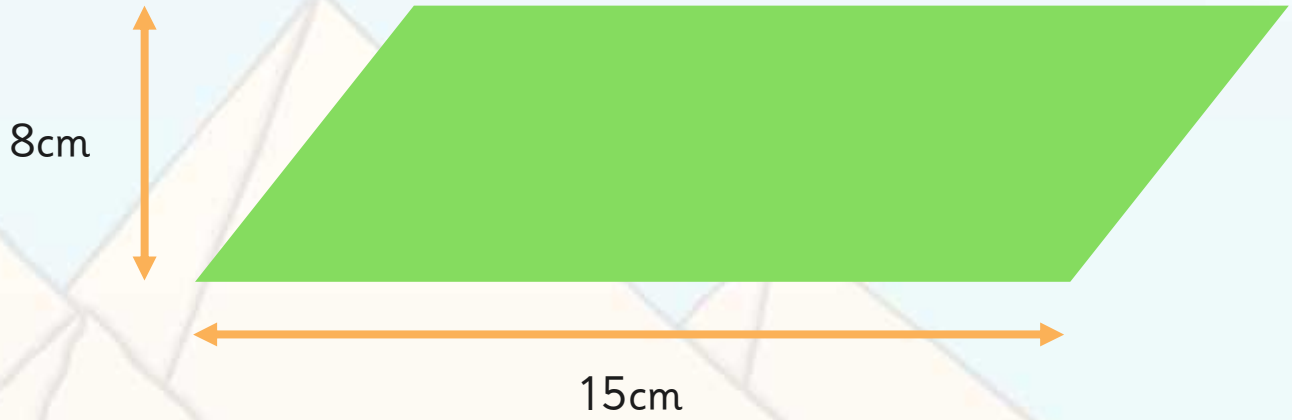
Calculate the area of this parallelogram.



Area = 14cm × 7cm = 98cm²

Calculate

Calculate the area of this parallelogram.



Area = 15cm × 8cm = 120cm²

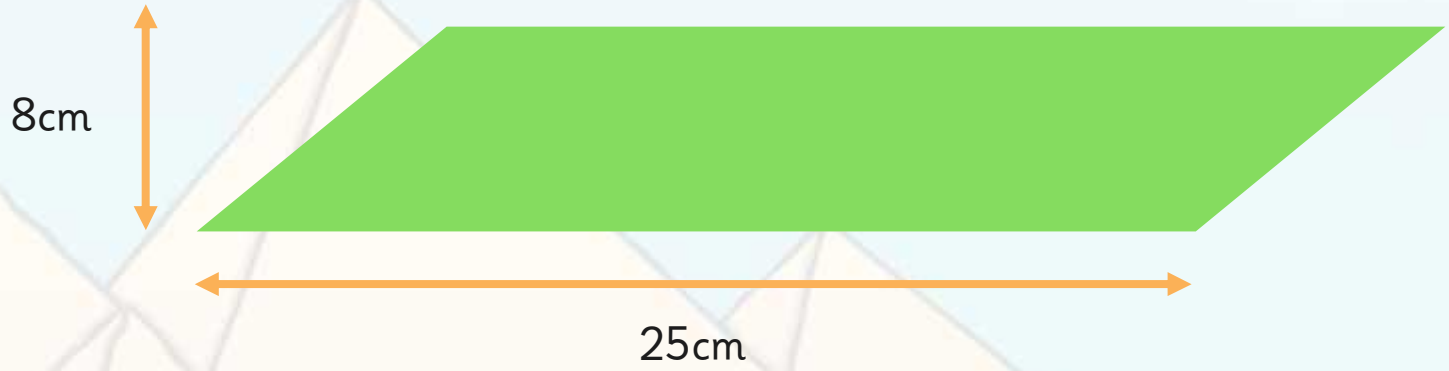
Calculate

Calculate the area of this parallelogram.

Area = 20cm × 6cm = 120cm²

Calculate

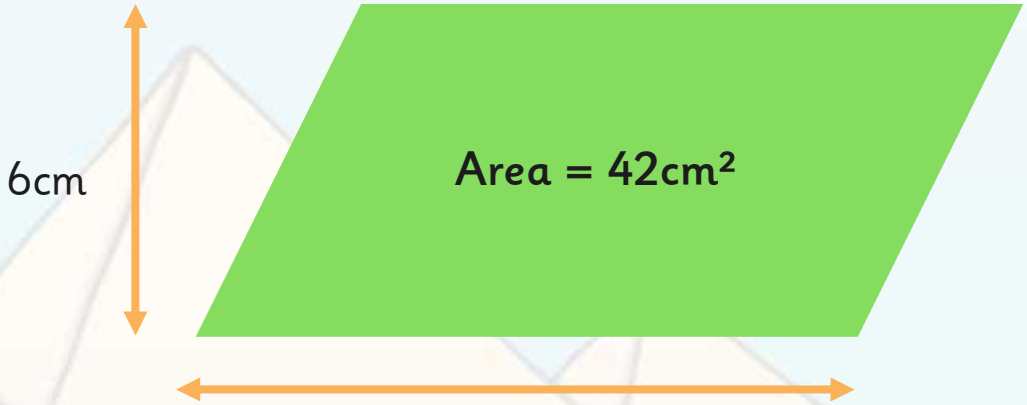
Calculate the area of this parallelogram.



Area = 25cm × 8cm = 200cm²

Calculate

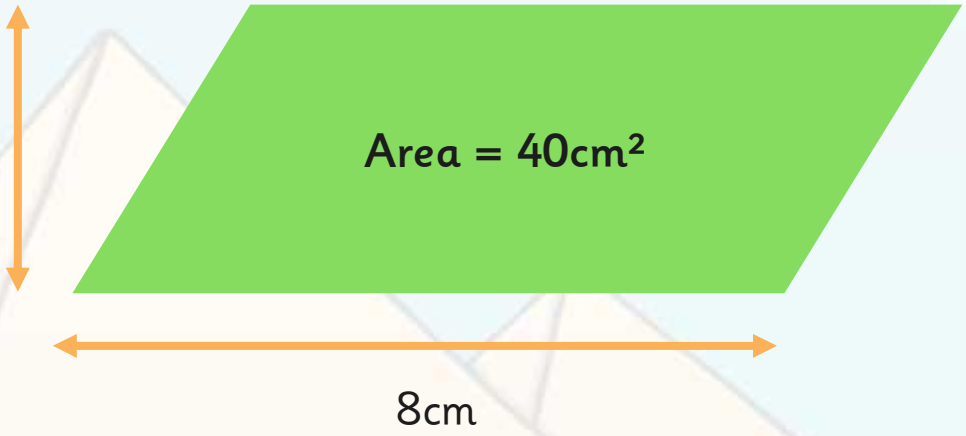
Calculate the **base** of this parallelogram.



$$\text{Base} = \frac{42}{6} = 7\text{cm}$$

Calculate

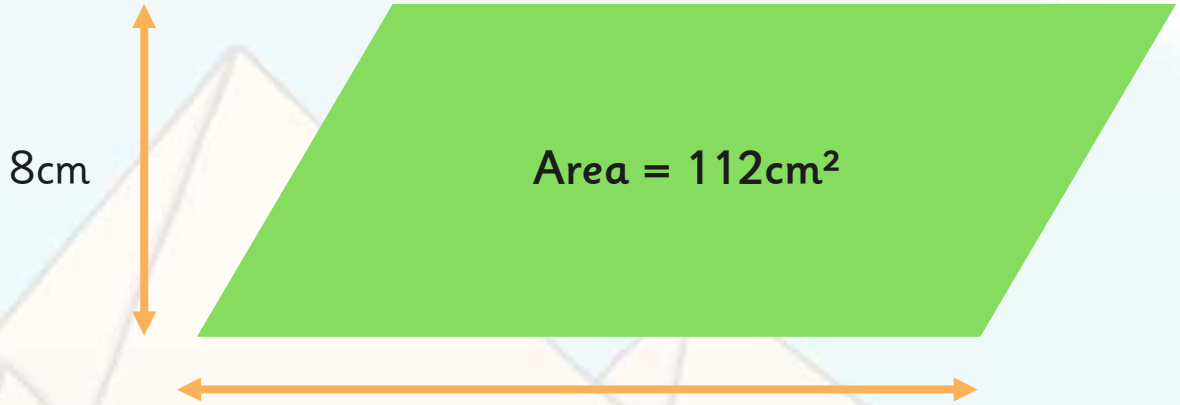
Calculate the **height** of this parallelogram.



$$\text{Height} = \frac{40}{8} = 5\text{cm}$$

Calculate

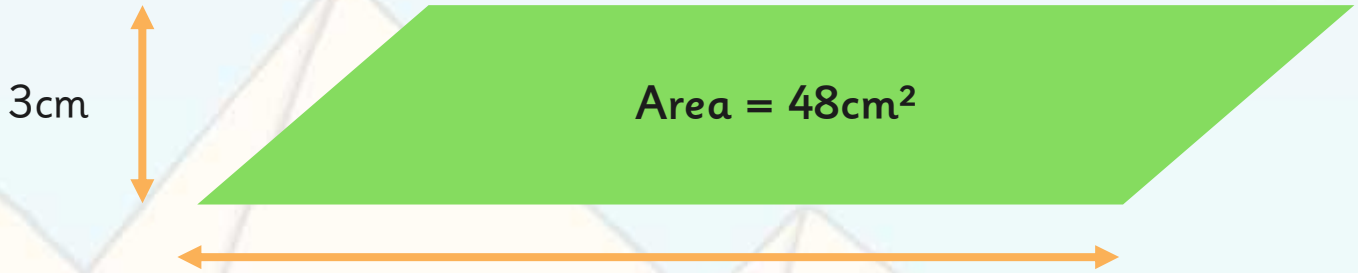
Calculate the **base** of this parallelogram.



$$\text{Base} = \frac{112}{8} = 14\text{cm}$$

Calculate

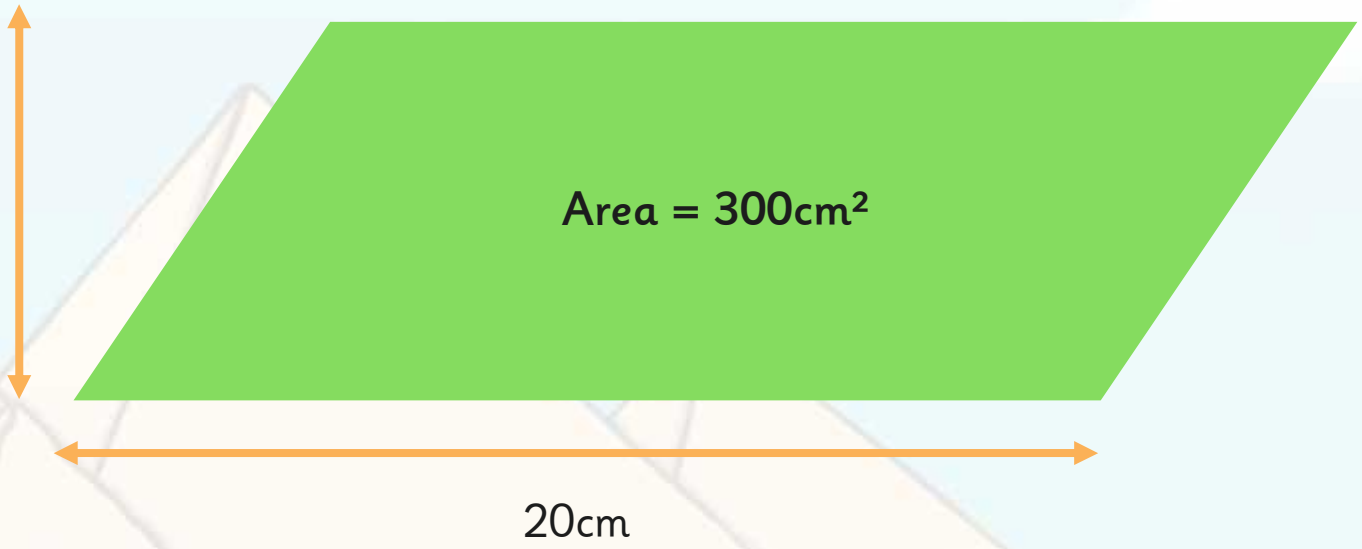
Calculate the **base** of this parallelogram.



$$\text{Base} = \frac{48}{3} = 16\text{cm}$$

Calculate

Calculate the **height** of this parallelogram.



$$\text{Height} = \frac{300}{20} = 15\text{cm}$$

Aim

- I can calculate the area of a triangle and a parallelogram.

Success Criteria

- I know the formula for calculating the area of triangles and parallelograms.
- I can understand why these formulas give the area of triangles and parallelograms.
- I can use the formulae to calculate the area of triangles and parallelograms.