

Finding the area of triangles, parallelograms, trapeziums and irregular shapes

Name:

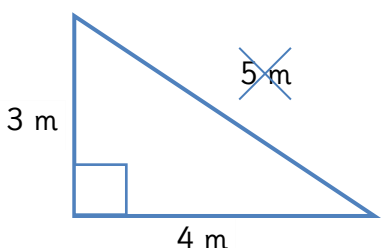
Date:

Finding the area of a triangle

“length \times width $\div 2$ ” ... “*T for Triangle/ T for Two – divide by 2*”

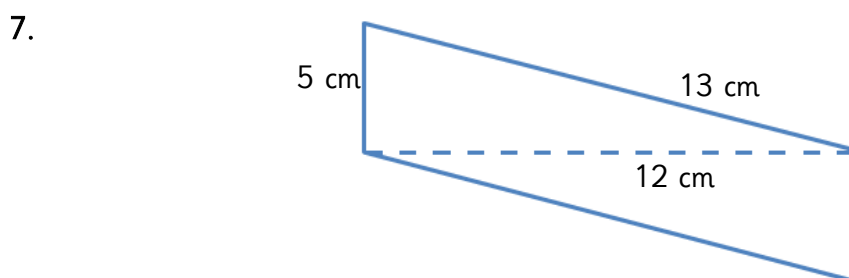
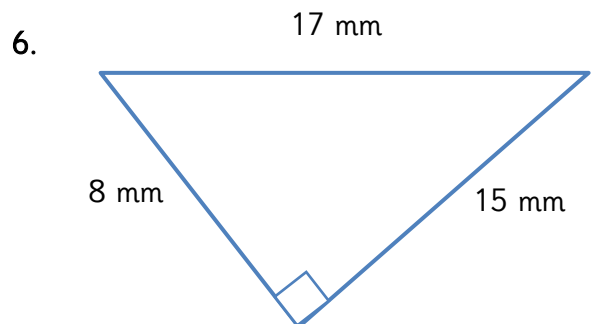
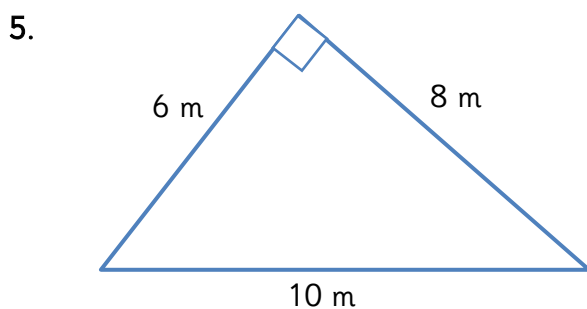
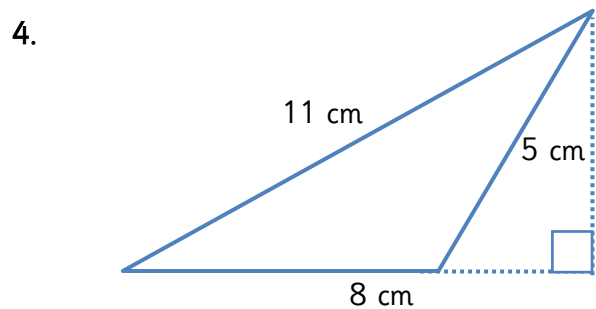
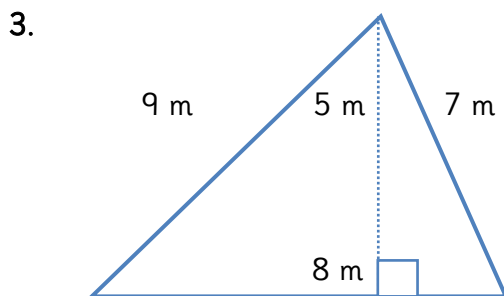
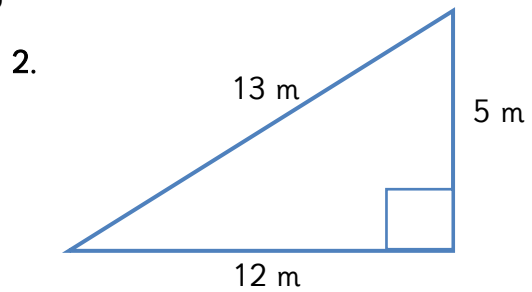
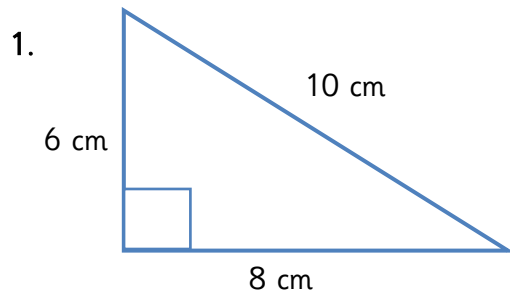
$\frac{1}{2} b \times h$

e.g.



Area = $3 \times 4 \div 2$
= 6 m^2

Exercise: Find the area of these triangles. Don't forget the units.

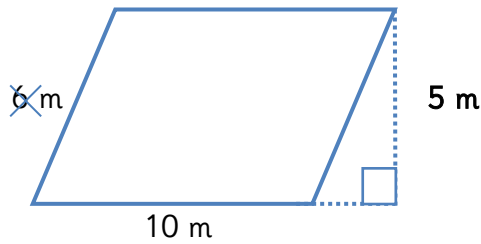


Finding the area of a parallelogram

$$\text{Area} = b \times h$$

Remember to multiply *two* numbers that are at right angles – remember *SNoTS!!!*

e.g.

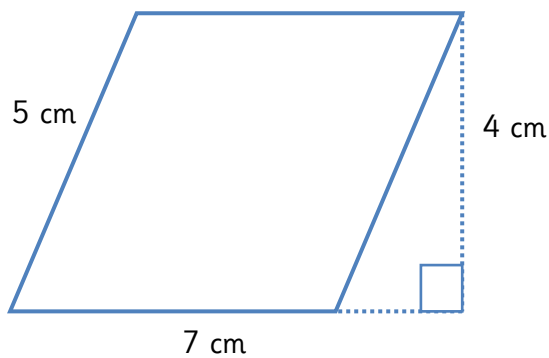


$$\begin{aligned} \text{Area} &= 10 \times 5 \\ &= 50 \text{ m}^2 \end{aligned}$$

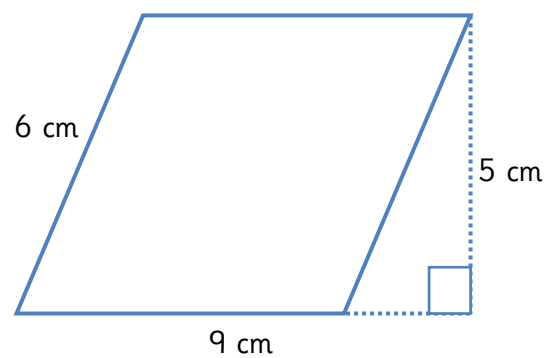
“Say No to Slants”

Exercise: Find the area of these parallelograms. Don't forget the units.

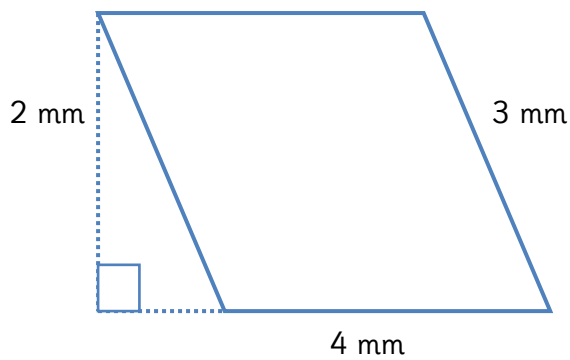
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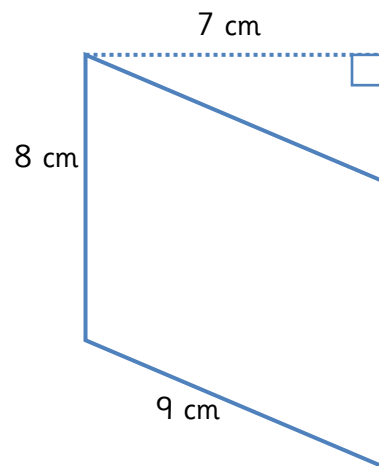
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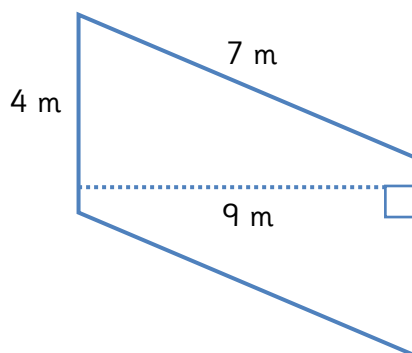
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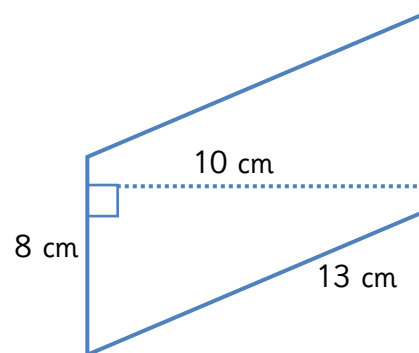
4.



5.



6.

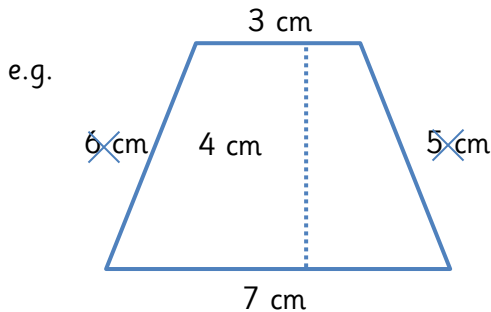


Finding the area of a Trapezium

$$\frac{1}{2}(a + b) \times h$$

"T for Trapezium/ T for Two – divide by 2"

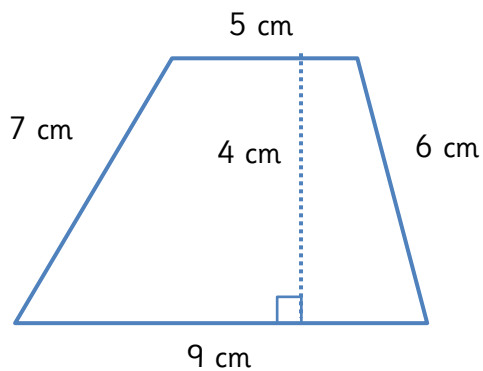
"add the top/bottom (parallel sides), times by distance between then half".



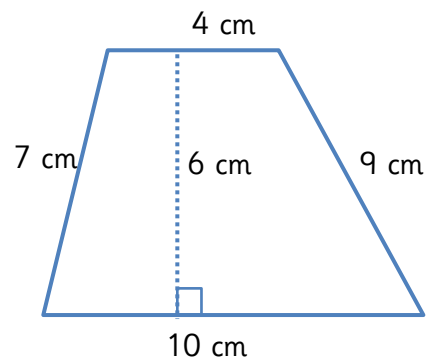
$$\begin{aligned} 3 + 7 &= 10 \\ 10 \times 4 &= 40 \\ 40 \div 2 &= 20 \text{ cm}^2 \end{aligned}$$

SNOTS!
"Say No to Slants"

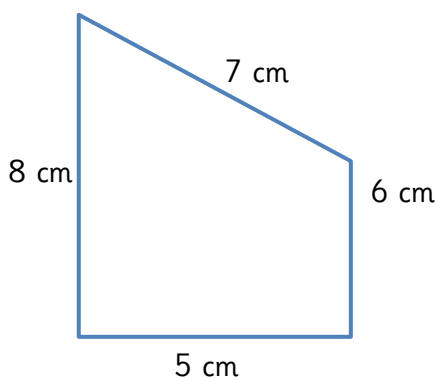
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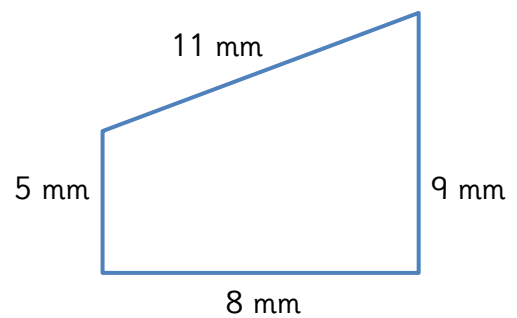
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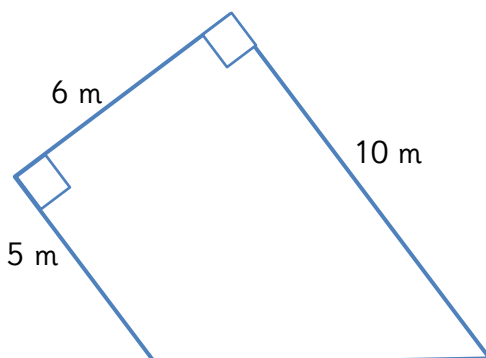
3.



4.



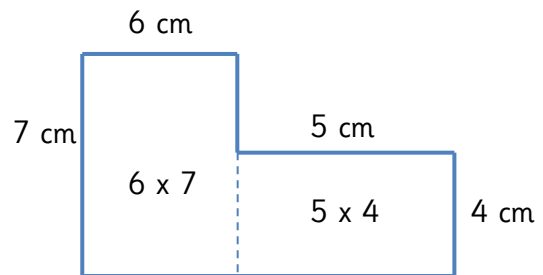
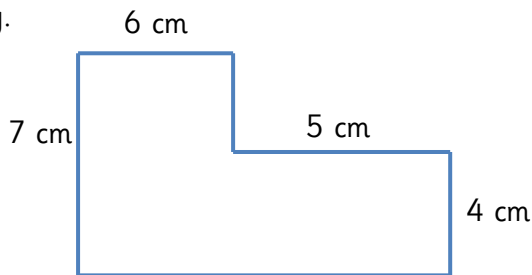
5.



Finding the area of an irregular shape

Now try to do it without the two rectangles showing by drawing a line to 'chop' the shape into two rectangles.

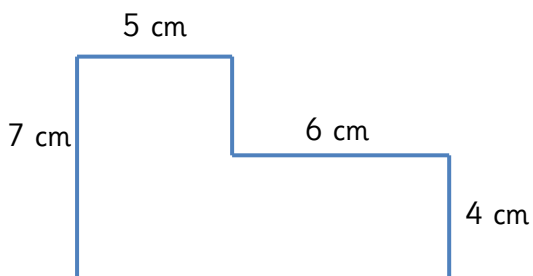
e.g.



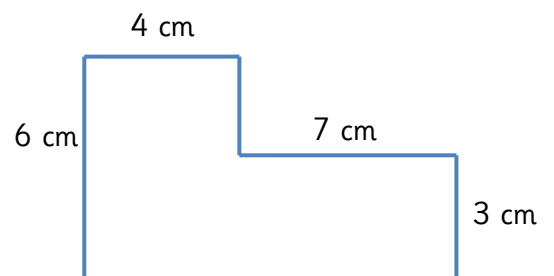
$$\begin{aligned} \text{Total area} &= 6 \times 7 + 5 \times 4 \\ &= 42 + 20 \\ &= \underline{62 \text{ cm}^2} \end{aligned}$$

Exercise: Find the area of these irregular shapes. Don't forget the units.

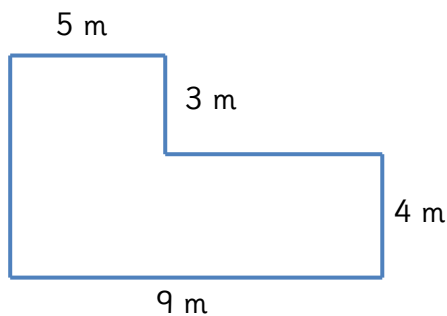
1.



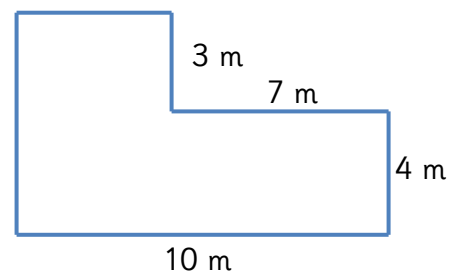
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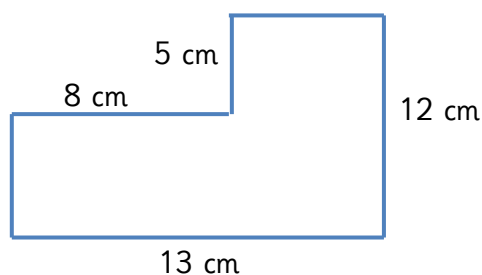
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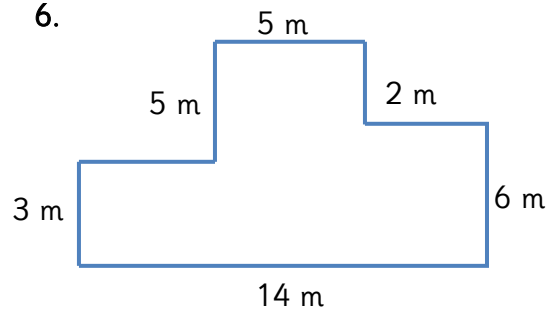
4.



5.



6.



Answers:

Triangles

1. 24 cm^2
2. 30 m^2
3. 20 m^2
4. 20 cm^2
5. 24 m^2
6. 60 mm^2
7. 60 cm^2

Parallelograms

1. 28 cm^2
2. 45 cm^2
3. 8 mm^2
4. 56 cm^2
5. 28 m^2
6. 80 cm^2

Trapeziums

1. 28 cm^2
2. 42 cm^2
3. 35 cm^2
4. 56 mm^2
5. 45 m^2

Irregular Shapes

1. 59 cm^2
2. 45 cm^2
3. 51 m^2
4. 49 m^2
5. 116 cm^2
6. 74 m^2