

Varied Fluency

Step 6: Area of a Parallelogram

National Curriculum Objectives:

Mathematics Year 6: (6M7b) [Calculate the area of parallelograms and triangles](#)

Mathematics Year 6: (6M7c) [Recognise when it is possible to use formulae for the area of shapes](#)

Differentiation:

Developing Questions to support finding the area of parallelograms using the formula: base x perpendicular height. Whole numbers only.

Expected Questions to support finding the area of parallelograms using the formula: base x perpendicular height. Includes some conversions (mm to cm) and some decimals (halves only). Children to select the base and perpendicular height from given measurements.

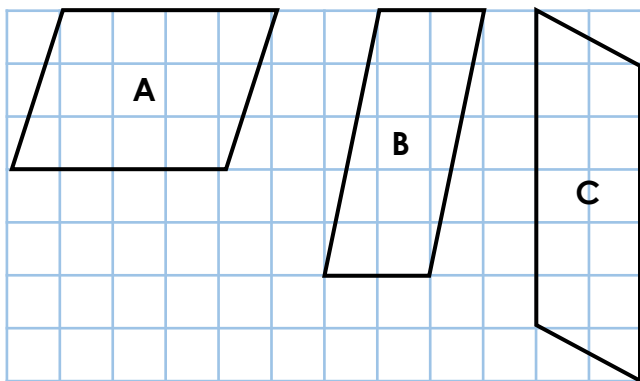
Greater Depth Questions to support finding the area of parallelograms using the formula: base x perpendicular height. Includes some conversions (mm to cm, cm to m and mm to m) and some decimals (halves and tenths). Children to select the base and perpendicular height from given measurements.

More [Year 6 Perimeter, Area and Volume](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Area of a Parallelogram

1a. Which parallelograms have an area of 12cm^2 ? $\square = 1\text{cm}^2$

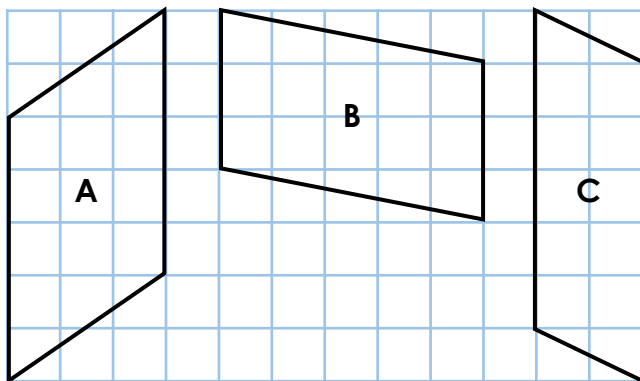


Not to scale

VF

Area of a Parallelogram

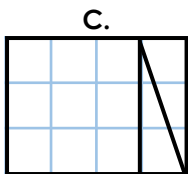
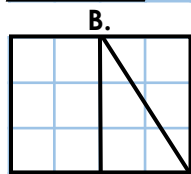
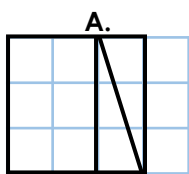
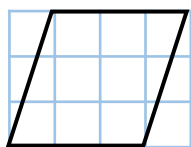
1b. Which parallelograms have an area of 15cm^2 ? $\square = 1\text{cm}^2$



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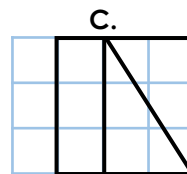
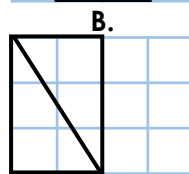
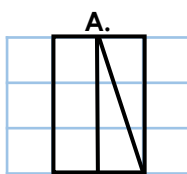
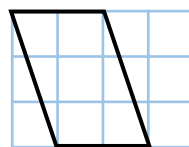
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2a. Which group of shapes make up the parallelogram below?



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2b. Which group of shapes make up the parallelogram below?



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3a. Use the formula: base x perpendicular height to calculate the area of the shape.

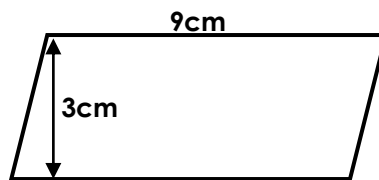


$$\square \times \square = \square \text{ cm}^2$$

Not to scale

VF

3b. Use the formula: base x perpendicular height to calculate the area of the shape.

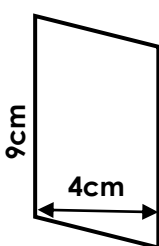
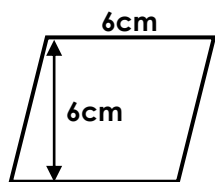


$$\square \times \square = \square \text{ cm}^2$$

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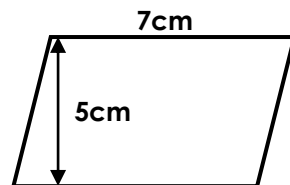
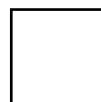
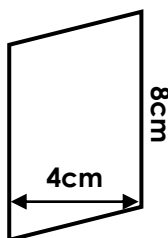
4a. Calculate the area of the shapes and complete the comparison statement.



Not to scale

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4b. Calculate the area of the shapes and complete the comparison statement.

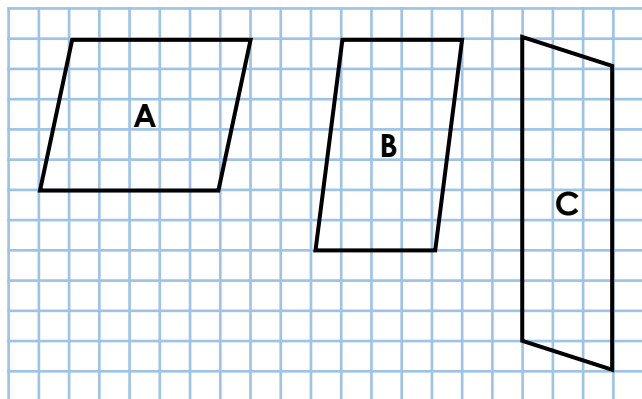


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Area of a Parallelogram

5a. Which parallelograms have an area of 30cm^2 ? $\square = 1\text{cm}^2$

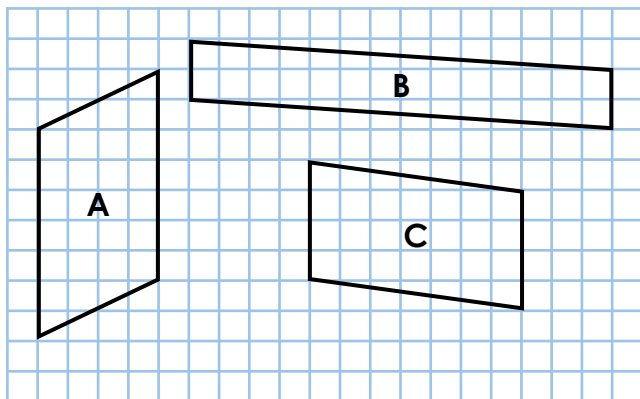


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Area of a Parallelogram

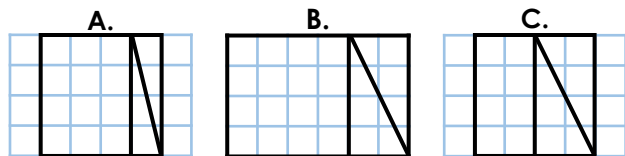
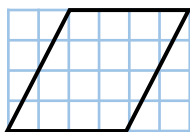
5b. Which parallelograms have an area of 28cm^2 ? $\square = 1\text{cm}^2$



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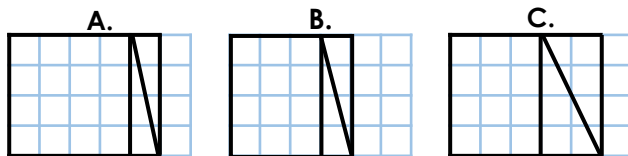
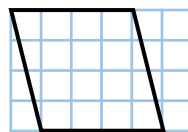
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6a. Which group of shapes make up the parallelogram below?



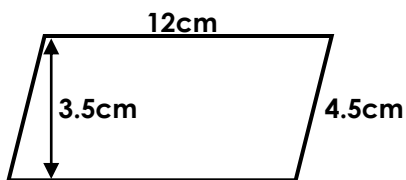
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6b. Which group of shapes make up the parallelogram below?



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7a. Use the formula: base x perpendicular height to calculate the area of the shape.

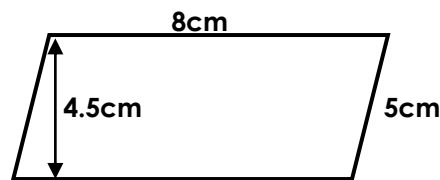


$$\square \times \square = \square \text{ cm}^2$$

Not to scale

VF

7b. Use the formula: base x perpendicular height to calculate the area of the shape.

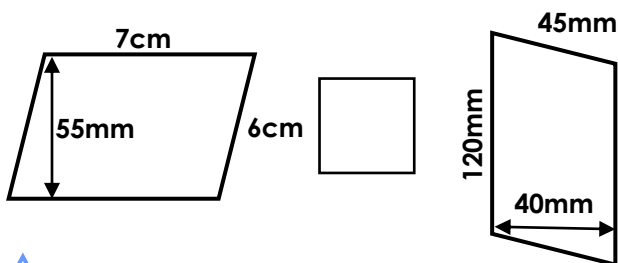


$$\square \times \square = \square \text{ cm}^2$$

Not to scale

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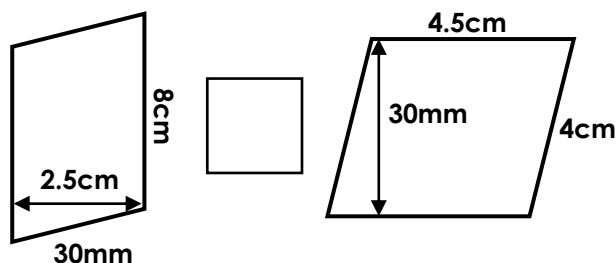
8a. Calculate the area of the shapes and complete the comparison statement.



Not to scale

VF

8b. Calculate the area of the shapes and complete the comparison statement.

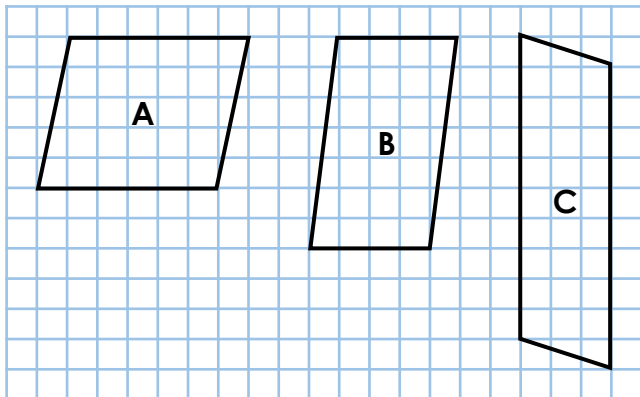


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Area of a Parallelogram

9a. Which parallelograms have an area of 67.5cm^2 ? $\square = 1.5\text{cm}$

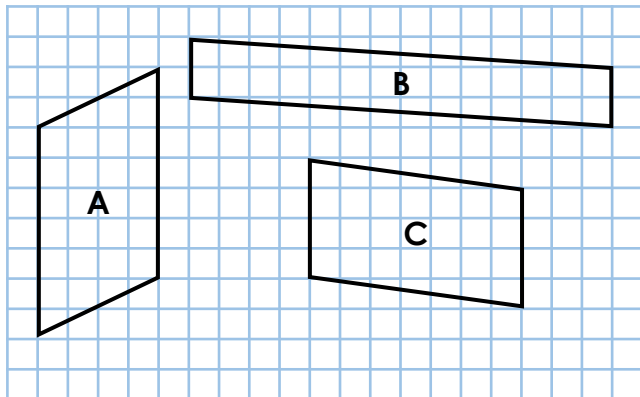


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Area of a Parallelogram

9b. Which parallelograms have an area of 63cm^2 ? $\square = 1.5\text{cm}$

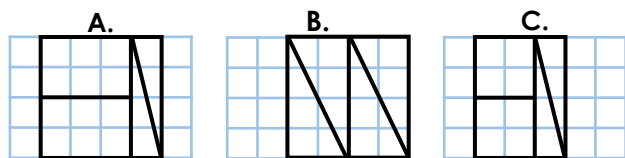


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10a. Tick the set of shapes which make a parallelogram with an area of 27cm^2 .

$\square = 1.5\text{cm}$

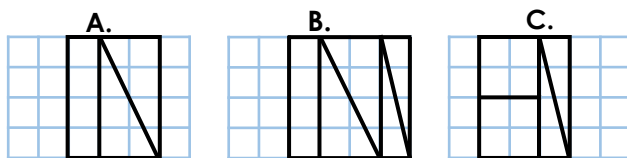


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10b. Tick the set of shapes which make a parallelogram with an area of 36cm^2 .

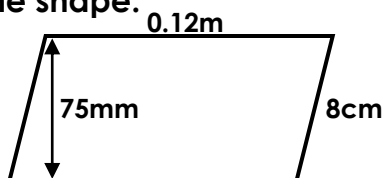
$\square = 1.5\text{cm}$



Not to scale

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11a. Use the formula: base x perpendicular height to calculate the area of the shape.



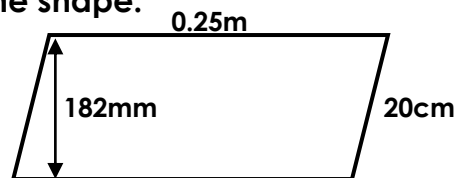
x = cm^2



Not to scale

VF

11b. Use the formula: base x perpendicular height to calculate the area of the shape.



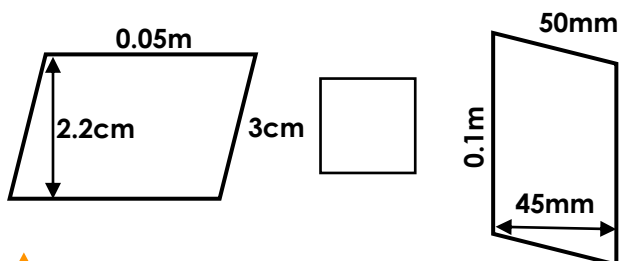
x = cm^2



Not to scale

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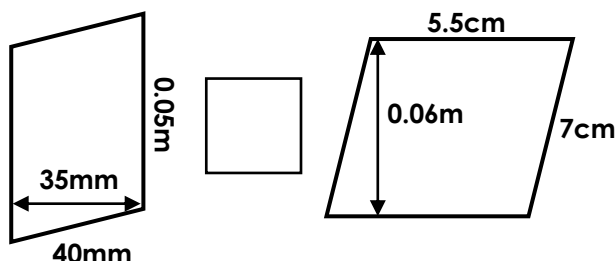
12a. Calculate the area of the shapes and complete the comparison statement.



Not to scale

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12b. Calculate the area of the shapes and complete the comparison statement.



Not to scale

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Varied Fluency
Area of a Parallelogram

Developing

1a. **A and C**

2a. **A**

3a. **$8\text{cm} \times 4\text{cm} = 32\text{cm}^2$**

4a. **$36\text{cm}^2 = 36\text{cm}^2$**

Expected

5a. **A and C**

6a. **C**

7a. **$12\text{cm} \times 3.5\text{cm} = 42\text{cm}^2$**

8a. **$38.5\text{cm}^2 < 48\text{cm}^2$**

Greater Depth

9a. **A and C**

10a. **C**

11a. **$12\text{cm} \times 7.5\text{cm} = 90\text{cm}^2$**

12a. **$11\text{cm}^2 < 45\text{cm}^2$**

Varied Fluency
Area of a Parallelogram

Developing

1b. **A and B**

2b. **A**

3b. **$9\text{cm} \times 3\text{cm} = 27\text{cm}^2$**

4b. **$32\text{cm}^2 < 35\text{cm}^2$**

Expected

5b. **A, B and C**

6b. **B**

7b. **$8\text{cm} \times 4.5\text{cm} = 36\text{cm}^2$**

8b. **$20\text{cm}^2 > 13.5\text{cm}^2$**

Greater Depth

9b. **A, B and C**

10b. **B**

11b. **$25\text{cm} \times 18.2\text{cm} = 455\text{cm}^2$**

12b. **$17.5\text{cm}^2 < 33\text{cm}^2$**