

Area of a Parallelogram

Area of a Parallelogram

1a. Keon says that half the area of the parallelogram below is 24cm^2 .



Use the formula base x perpendicular height to prove whether Keon is correct.



Not to scale

R

1b. Joslyn says that half the area of the parallelogram below is 20cm^2 .



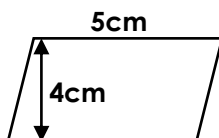
Use the formula base x perpendicular height to prove whether Joslyn is correct.



Not to scale

R

2a. Connor is tiling part of a swimming pool. The tiles are parallelograms.



The area he wants to cover is $400\text{cm} \times 200\text{cm}$.

The area needs to be completely covered. How many tiles will he need?

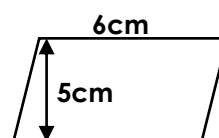
Show your working.



Not to scale

PS

2b. Larry is covering part of a floor with tiles. The tiles are parallelograms.



The area he wants to cover is $300\text{cm} \times 200\text{cm}$.

The area needs to be completely covered. How many tiles will he need?

Show your working.



Not to scale

PS

3a. Sanaa has drawn a parallelogram.

She says,



The area of my parallelogram is 21cm^2 and the base is 7cm , so the perpendicular height must be 2cm .

Is she correct? Explain your answer.



Not to scale

R

3b. Kale has drawn a parallelogram.

He says,



The area of my parallelogram is 36cm^2 and the base is 6cm , so the perpendicular height must be 6cm .

Is he correct? Explain your answer.



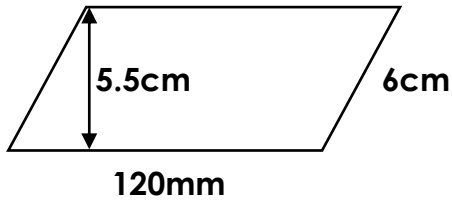
Not to scale

R

Area of a Parallelogram

Area of a Parallelogram

4a. Daniel says that half the area of the parallelogram below is 60cm^2 .



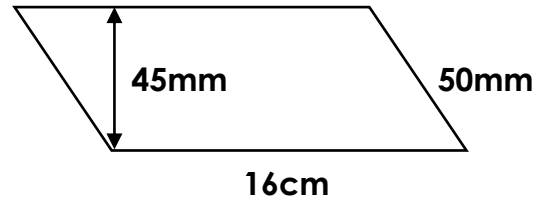
Use the formula base $\times$ perpendicular height to prove whether Daniel is correct.



Not to scale

R

4b. Julia says that half the area of the parallelogram below is 36mm^2 .



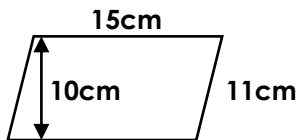
Use the formula base $\times$ perpendicular height to prove whether Julia is correct.



Not to scale

R

5a. Clive is paving part of his garden. The paving stones are parallelograms.



The area he wants to cover is $400\text{cm} \times 150\text{cm}$.

The area needs to be completely covered. How many paving stones will he need?

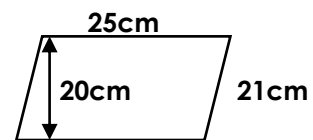
Show your working.



Not to scale

PS

5b. Frazer is tiling part of a bathroom. The tiles are parallelograms.



The area he wants to cover is $500\text{cm} \times 250\text{cm}$.

The area needs to be completely covered. How many tiles will he need?

Show your working.



Not to scale

PS

6a. Jenni has drawn a parallelogram.

She says,



The area of my parallelogram is 60cm^2 and the base is 240mm , so the perpendicular height must be 2cm .

Is she correct? Explain your answer.



Not to scale

R

6b. Silas has drawn a parallelogram.

He says,



The area of my parallelogram is 55cm^2 and the base is 100mm , so the perpendicular height must be 5cm .

Is he correct? Explain your answer.



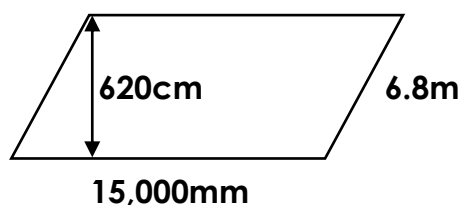
Not to scale

R

Area of a Parallelogram

Area of a Parallelogram

7a. Judah says that half the area of the parallelogram below is 46m^2 .



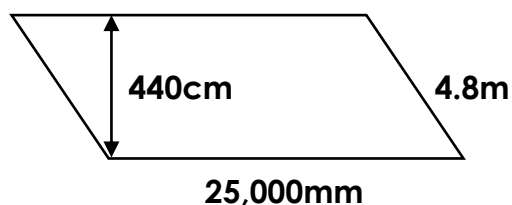
Use the formula base x perpendicular height to prove whether Judah is correct.



Not to scale

R

7b. Miley says that half the area of the parallelogram below is 56m^2 .



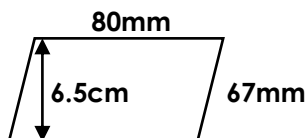
Use the formula base x perpendicular height to prove whether Miley is correct.



Not to scale

R

8a. Ivy is creating part of a patchwork quilt. The patches are parallelograms.



The area she wants to cover is $8\text{m} \times 0.13\text{m}$.

The area needs to be completely covered. How many patches will she need?

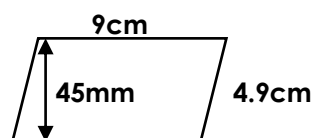
Show your working.



Not to scale

PS

8b. Lionel is paving part of a garden path. The paving stones are parallelograms.



The area he wants to cover is $90\text{cm} \times 0.9\text{m}$.

The area needs to be completely covered. How many paving stones will he need?

Show your working.



Not to scale

PS

9a. Lilah has drawn a parallelogram.

She says,



The area of my parallelogram is 75cm^2 and the base is 0.15m , so the perpendicular height must be 500mm .

Is she correct? Explain your answer.



Not to scale

R

9b. Kylo has drawn a parallelogram.

He says,



The area of my parallelogram is 77cm^2 and the base is 0.22m , so the perpendicular height must be 30mm .

Is he correct? Explain your answer.



Not to scale

R