4.8 Area of Parallelograms, Trapezia and Compound Shapes: 30-minute Pack

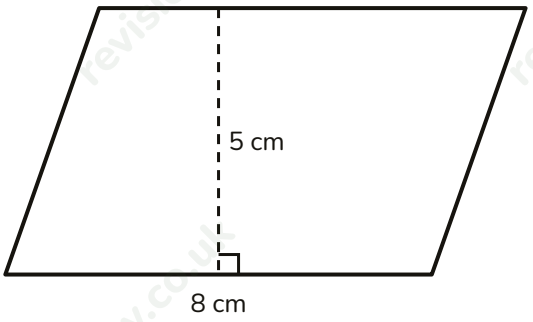
Calculators not allowed · about 30 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A parallelogram has base 8 cm and height 5 cm. If the base is doubled and the height stays the same, what happens to the area? Give a number and a short reason.

Diagram NOT accurately drawn

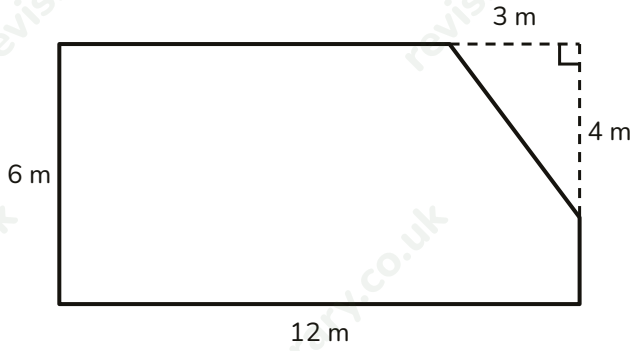


(2)

© Revision Library | revisionlibrary.co.uk

2 A rectangle 12 m by 6 m has a right triangle removed from one corner. The triangle has legs 3 m and 4 m (right angle between them). Find the area of the remaining shape.

Diagram NOT accurately drawn

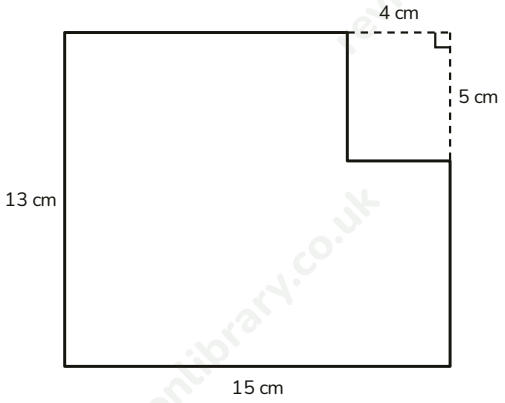


(3)

---

3 An L-shape is made by taking a 15 cm by 13 cm rectangle and cutting a 4 cm by 5 cm rectangle out of one corner.
Work out the area of the L-shape.

Diagram NOT accurately drawn

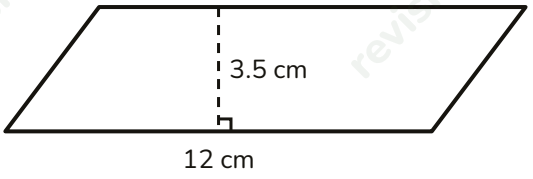


(3)

© Revision Library | revisionlibrary.co.uk

4 Calculate the area of a parallelogram with base 12 cm and height 3.5 cm. Give your answer in cm^2.

Diagram NOT accurately drawn

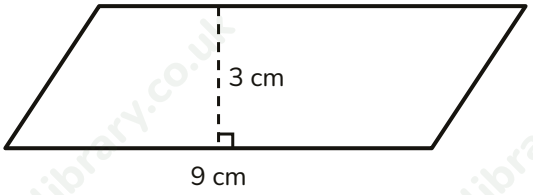


(2)

---

5 A parallelogram has a base of 9 cm and a perpendicular height of 3 cm. Work out its area.

Diagram NOT accurately drawn



(2)

---

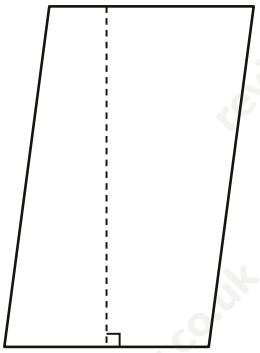
6 A floor is 8 m long and 6 m wide. It is covered with square tiles of side 20 cm. How many tiles are needed? ($1\ m^2 = 10\ 000\ cm^2$)

(3)

© Revision Library | revisionlibrary.co.uk

7 A parallelogram has area 60 cm² and base 6 cm. Work out the perpendicular height.

Diagram NOT accurately drawn

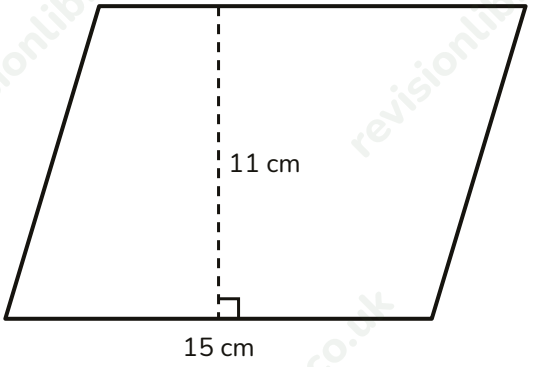


(2)

---

8 A parallelogram has a base of 15 cm and a perpendicular height of 11 cm. Work out its area.

Diagram NOT accurately drawn

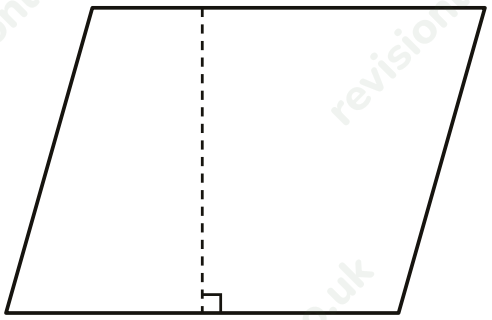


(2)

© Revision Library | revisionlibrary.co.uk

9 A parallelogram has base 9 cm and area 63 cm². State the height.

Diagram NOT accurately drawn



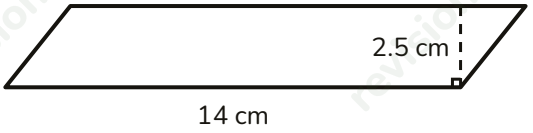
9 cm

Area = 63 cm²

(1)

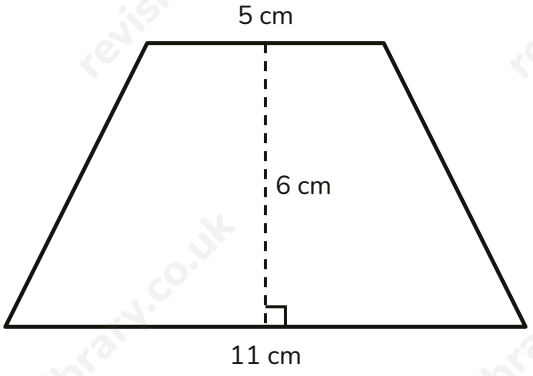
© Revision Library | revisionlibrary.co.uk

10 Calculate the area of a parallelogram with base 14 cm and height 2.5 cm. Give your answer in cm^2.



(1)

11 Find the area of a trapezium with parallel sides 5 cm and 11 cm and height 6 cm.



(2)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 4.8 Area of Parallelograms, Trapezia and Compound Shapes: 30-minute Pack

Question 1

State new area calculation or relation: original 8 x 5 = 40 so new base 16 gives 16 x 5 = 80	M1
Area doubles to 80 cm², because area = base x height so doubling base doubles area	A1

Answer: **80 cm^2**

Question 2

Area rectangle 12 x 6 = 72 and triangle area 1/2 x 3 x 4 = 6 calculated	M1
Subtract triangle from rectangle: 72 - 6	M1
66 m² cao	A1

Answer: **66 m^2**

Question 3

15 x 13 = 195	M1
4 x 5 = 20	M1
175 cm² cao	A1

Answer: **175 cm^2**

Question 4

Use area = base x height: 12 x 3.5 or equivalent	M1
42 cm² cao	A1

Answer: **42 cm^2**

Question 5

9 x 3	M1
27 cm² cao	A1

Answer: **27 cm^2**

Question 6

area of floor in cm^2: 480000	M1
480000 ÷ 400	M1
1200 cao	A1

Answer: **1200**

Question 7

60 ÷ 6	M1
10 cm cao	A1

Answer: **10 cm**

Question 8

15 x 11	M1
165 cm² cao	A1

Answer: **165 cm^2**

Question 9

height = 63 / 9 = 7 cm cao	B1

Answer: **7 cm**

Question 10

35 cm² cao	B1

Answer: **35 cm^2**

Question 11

uses area = (a + b)/2 x h	M1
48 cm² cao	A1

Answer: **48 cm^2**

© Revision Library | revisionlibrary.co.uk