Name:

Exam Style Questions

Area of a Parallelogram

Corbettmaths

Equipment needed: Calculator, pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

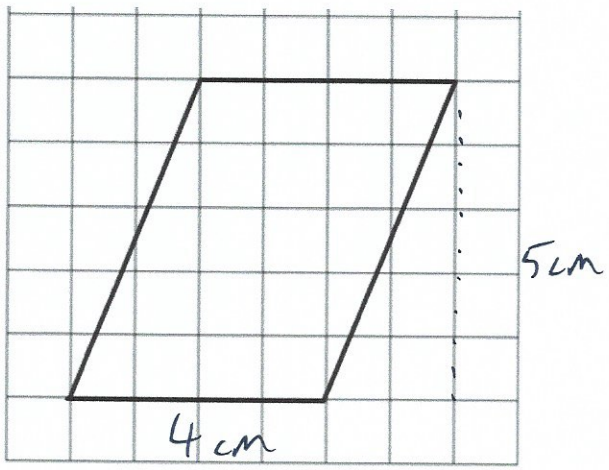
Video Tutorial

www.corbettmaths.com/contents

Video 44

Answers and Video Solutions

1. The diagram shows a parallelogram on a centimetre square gird.



Work out the area of the parallelogram.
State the units of your answer.

$4 \times 5 = 20$

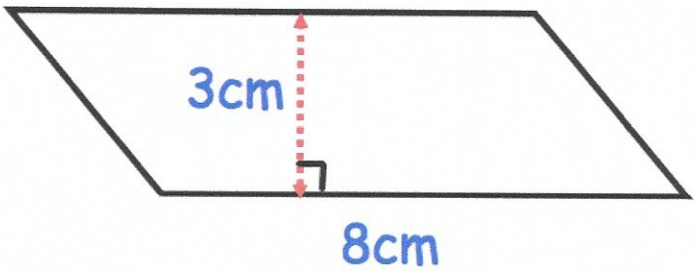
$20 cm^2$

.....

(3)

---

2. Shown below is a parallelogram



Work out the area of the parallelogram.
State the units of your answer.

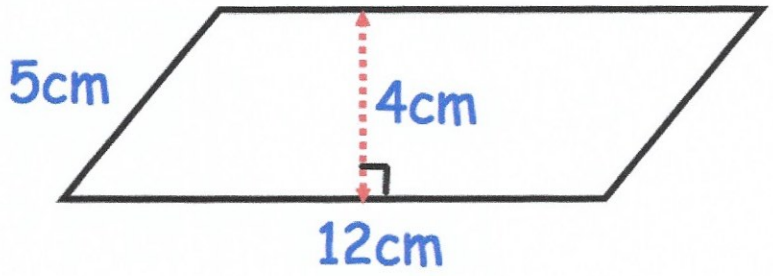
$3 \times 8 = 24$

$24 cm^2$

.....

(3)

3.



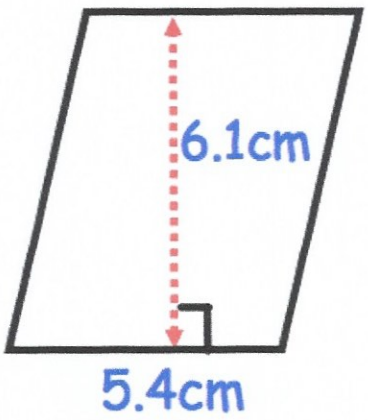
Calculate the area of the parallelogram.

$12 \times 4 = 48$

48 ..... cm^2

(2)

4.



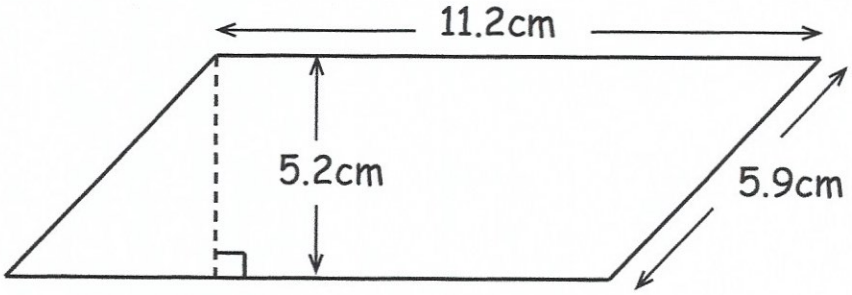
Work out the area of the parallelogram.

$5.4 \times 6.1 = 32.94$

32.94 ..... cm^2

(2)

5. This diagram shows a parallelogram.



Calculate the area of this parallelogram.

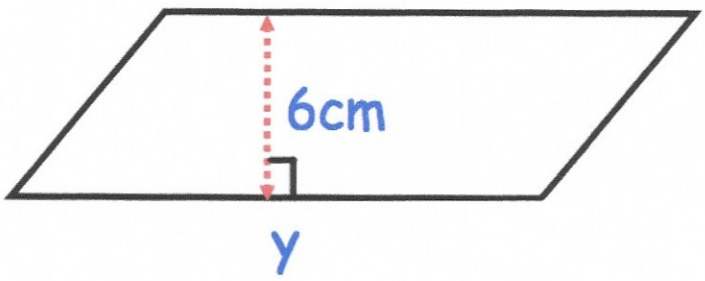
$5.2 \times 11.2 = 58.24$

58.24 .....cm²

(2)

---

6. This diagram shows a parallelogram.



The area of the parallelogram is 54cm².

Find the length of the base, y.

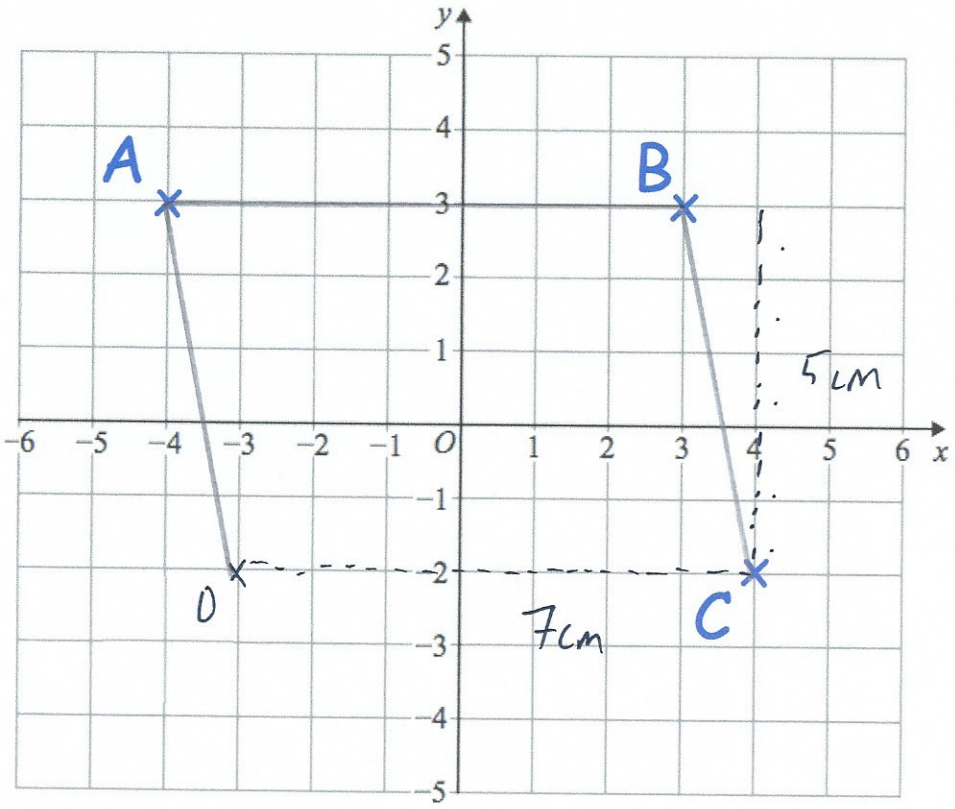
$54 \div 6 = 9$

$54 \div 6 = 9$

9 .....cm

(2)

7. Shown below are the points A, B and C on a centimetre square grid.



The point D is plotted so that ABCD is a parallelogram.

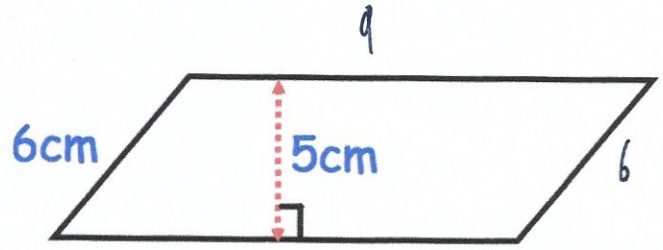
Find the area of the parallelogram.

$7 \times 5 = 35$

35 .....cm²

(3)

8. The diagram shows a parallelogram that has perimeter 30cm.



Calculate the area of the parallelogram.

6 + 6 = 12

30 - 12 = 18

18 ÷ 2 = 9

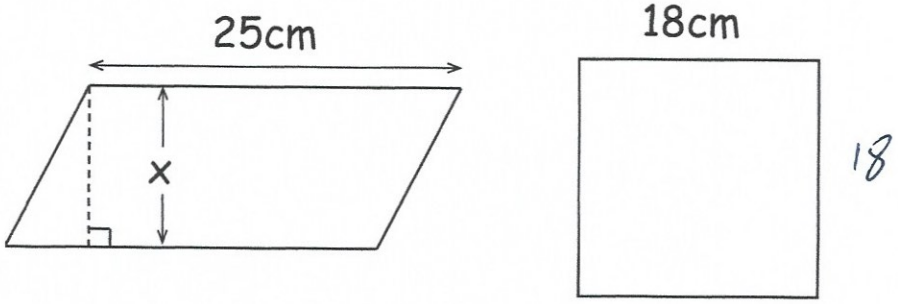
5 × 9

45 .....cm²

(4)

---

9. Shown below is a parallelogram and a square.



The area of the square and parallelogram are equal.

Find the perpendicular height of the parallogram, x.

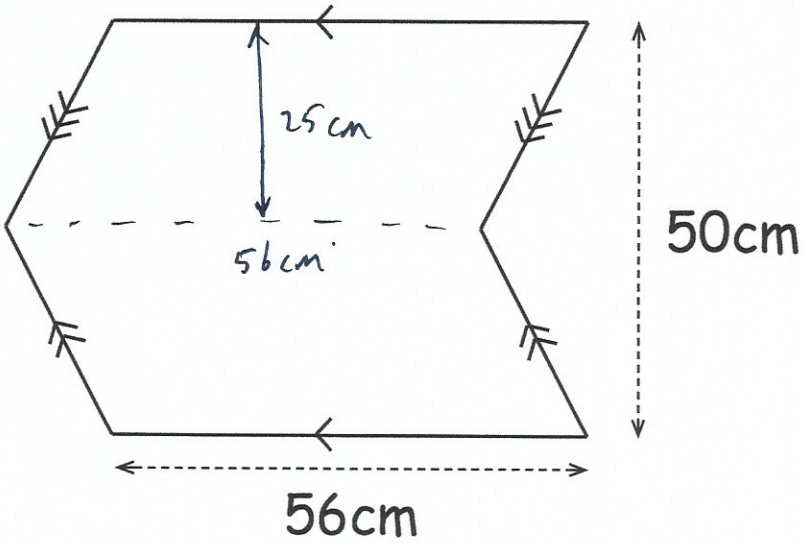
18 × 18 = 324

324 ÷ 25 = 12.96

12.96 .....cm

(3)

10. Dylan creates a logo by joining two congruent parallelograms.



Find the area of the logo.

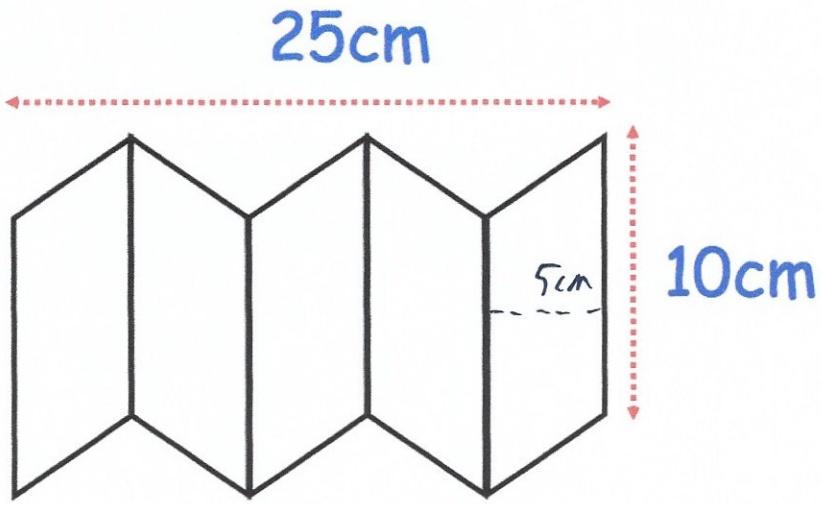
$25 \times 56 = 1400$

$1400 \times 2 = 2800$

2800 ..... cm^2

(3)

11.



The diagram shows a logo that is made up of 5 identical parallelograms.

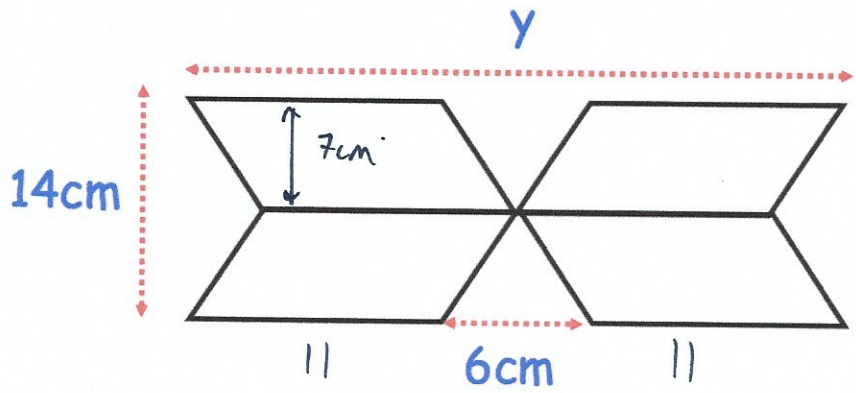
Find the area of one parallelogram.

$5 \times 10 = 50$

50 .....cm^2

(3)

12. A shape is made from 4 congruent parallelograms.



The area of the shape is 308cm².

Work out the length labelled y.

$308 \div 4 = 77 \text{ cm}^2$

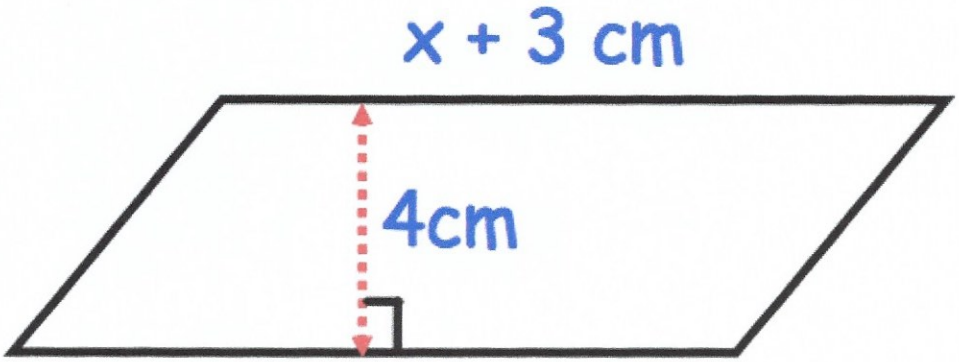
$77 \div 7 = 11 \text{ cm}$

$11 + 6 + 11 = 28$

28 .....cm

(5)

13. Below is a parallelogram with length x + 3 cm and perpendicular height of 4cm.



The area of the parallelogram is 30cm²

Find the size of x.

$4(x+3) = 30$

$4x + 12 = 30$

$4x = 18$

$x = 4.5$

or

$30 \div 4 = 7.5$

$x + 3 = 7.5$

$x = 4.5$

4.5

.....cm

(4)