Name:

Exam Style Questions

Perimeter

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

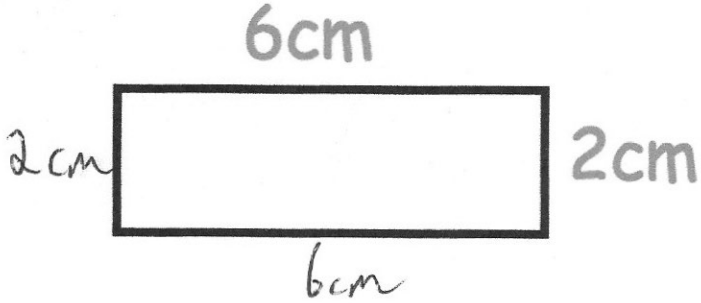
Video Tutorial

www.corbettmaths.com/contents

Video 241

Answers and Video Solutions

1. Shown below is a rectangle.



Not drawn accurately

Work out the perimeter of the rectangle.
Include suitable units.

$6 + 6 + 2 + 2 = 16$

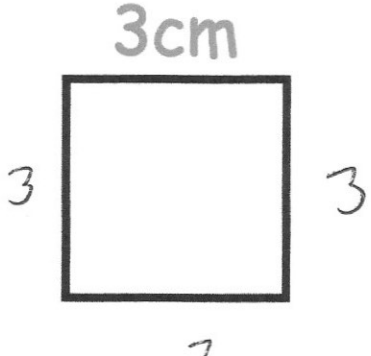
16cm

.....

(2)

---

2. Shown below is a square.



Not drawn accurately

Work out the perimeter of the square.
Include suitable units.

$3 + 3 + 3 + 3 = 12$

or

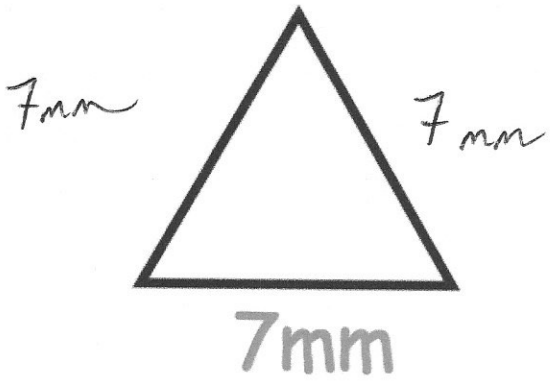
$4 \times 3 = 12$

12cm

.....

(2)

3. Shown below is an equilateral triangle.



Work out the perimeter of the triangle.
Include suitable units.

$7 + 7 + 7 = 21$

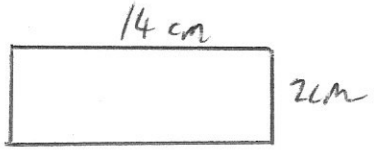
21 mm

(2)

4. A rectangle has a perimeter of 32cm.

Write down a possible pair of values for its length and width.

e.g.



$14 + 2 + 14 + 2 = 32\text{cm}$

10 14 15 etc

6 2 1

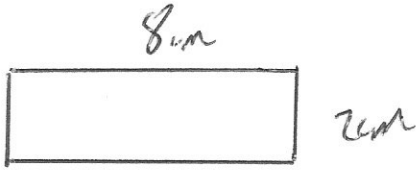
Length: 15 cm Width: 1 cm

(1)

5. A rectangle has a perimeter of 20cm.

Write down a possible pair of values for its length and width.

e.g.



$8 + 2 + 8 + 2 = 20\text{cm}$

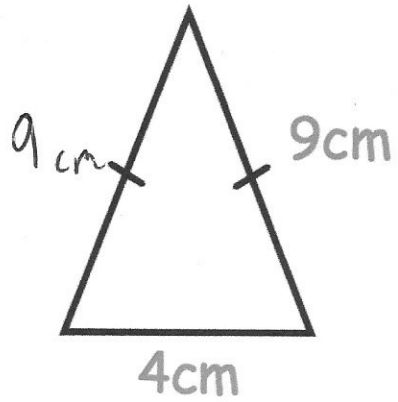
8 7 6 etc

2 3 4

Length: 6 cm Width: 4 cm

(1)

6. Shown below is an isosceles triangle.



Calculate the perimeter of the triangle.

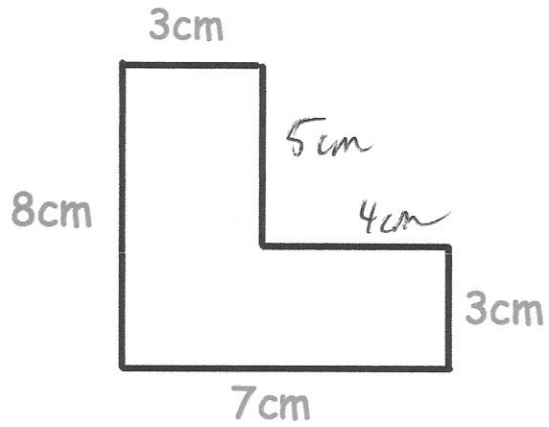
$9 + 9 + 4$

22

.....cm

(2)

7.



Calculate the perimeter of the shape above.

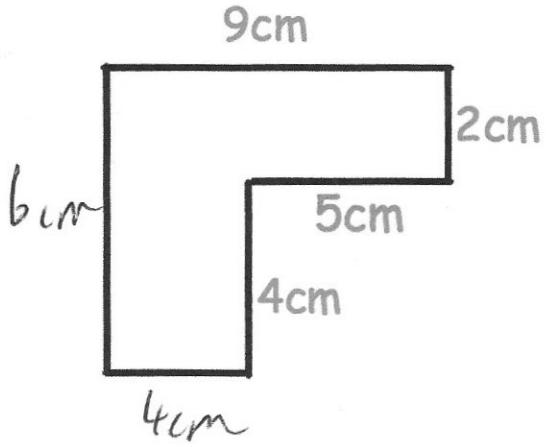
$8 + 7 + 3 + 4 + 5 + 3 = 30$

30

.....cm

(2)

8.



Calculate the perimeter of the shape above.

$9+2+5+4+4+6$

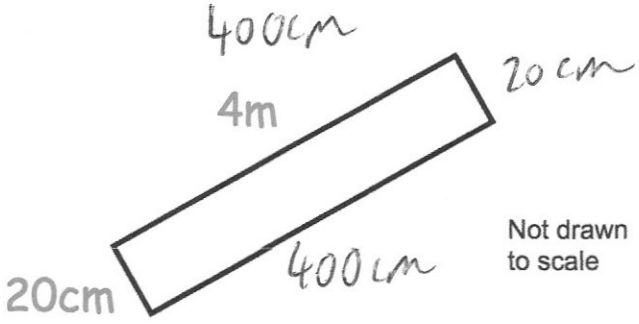
30

.....cm

(2)

---

9. Shown below is a rectangle.



Work out the perimeter.
Give your answer in centimetres.

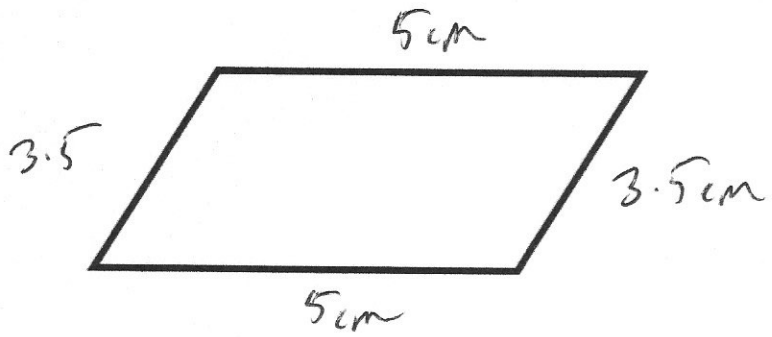
$400+400+20+20$

840

.....cm

(2)

10. The perimeter of a parallelogram is 17cm.
The length of each long side is 5cm.



Work out the length of each short side.

$5 + 5 = 10$

$17 - 10 = 7$

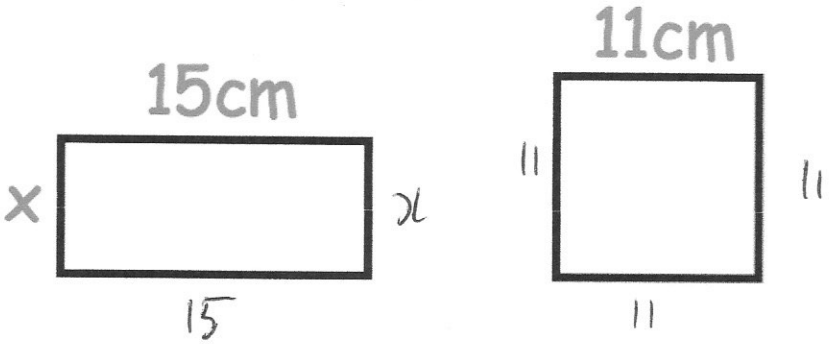
$7 \div 2 = 3.5$ cm

3.5 .....cm

(2)

---

11. The perimeter of the rectangle and the square are the same.



Find the width of the rectangle, x.

$11 + 11 + 11 + 11 = 44$

$15 + 15 = 30$

$44 - 30 = 14$

$14 \div 2 = 7$

7 .....cm

(3)

12. The length of a rectangle is 13.6 cm
The perimeter of the rectangle is 37.8cm

Calculate the width of the rectangle.

$13.6 + 13.6 = 27.2$

$37.8 - 27.2 = 10.6$

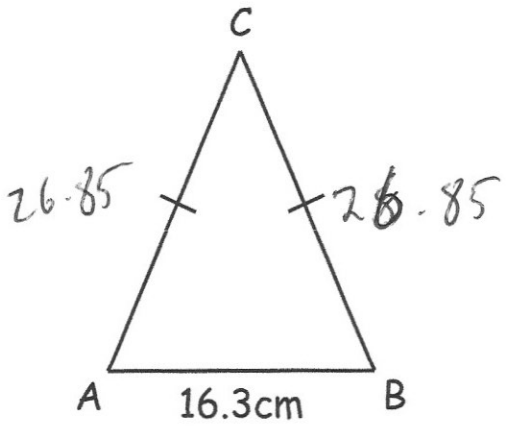
$10.6 \div 2 = 5.3$

5.3 .....cm

(3)

---

13. ABC is an isosceles triangle.



The perimeter of triangle ABC is 70cm

Work out the length of side AC.

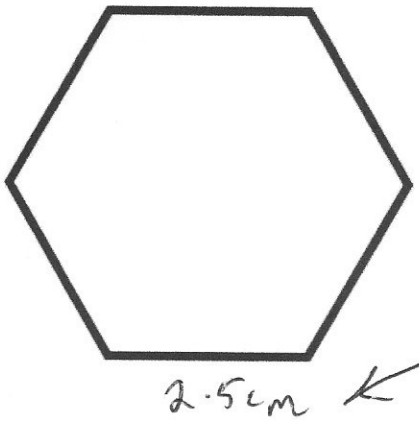
$70 - 16.3 = 53.7$

$53.7 \div 2 = 26.85$ cm

26.85 .....cm

(3)

14. The regular hexagon is **drawn accurately.**



Drawn accurately

will depend on your worksheet.

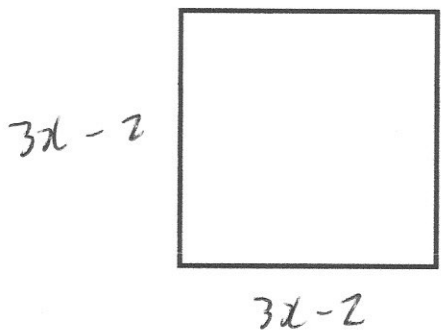
Find the perimeter of the hexagon.

$6 \times 2.5\text{ cm}$

15 .....cm

(3)

15. A square is shown below.



Write an expression for the perimeter of the square.

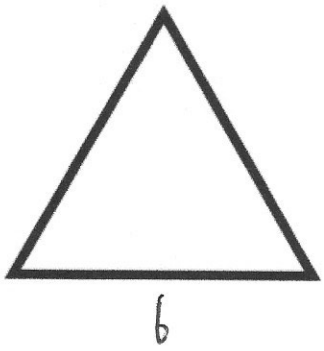
$(3x-2) + (3x-2) + (3x-2) + (3x-2)$

$= 12x - 8$

$12x - 8$

(2)

16. Shown below is an equilateral triangle with side length 6cm.



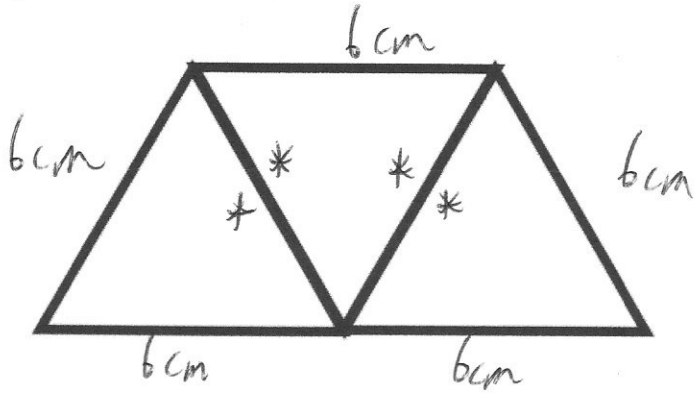
(a) Find the perimeter of the triangle.

6 + 6 + 6 = 18

.....18.....cm

(1)

Three equilateral triangles, each with side length 6cm, are put together to make one larger shape.



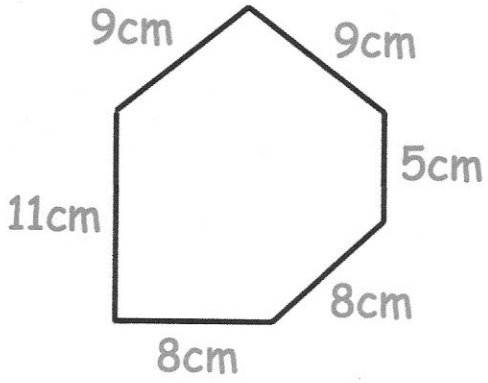
Jemima says that the perimeter of the larger shape will be **three times** the perimeter of one of the triangles.

(b) Explain why Jemima is wrong.

The perimeter of the large shape is 30cm. The sides marked with * are inside the larger shape, therefore are not included in the calculation of the perimeter.

(2)

17.



Not drawn to scale

(a) Name the shape above.

Hexagon

(1)

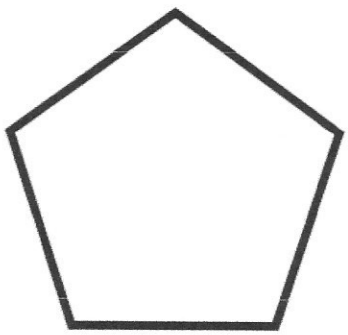
(b) Find the perimeter of the shape.

$11 + 9 + 9 + 5 + 8 + 8$

50cm

(1)

(c) The diagram shows a regular pentagon.



The perimeter of the pentagon is equal to the perimeter of the shape above.

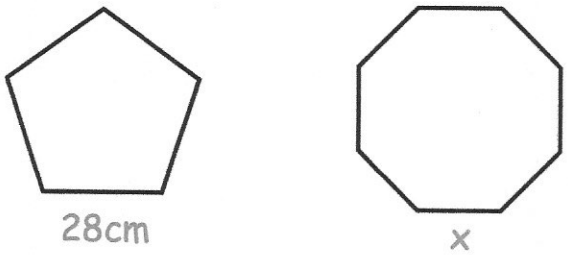
Work out the length of one side of the pentagon.

$50 \div 5 = 10$

10cm

(2)

18. Shown below is a regular pentagon and a regular octagon.



The perimeter of the pentagon is equal to the perimeter of the octagon.

Find x.

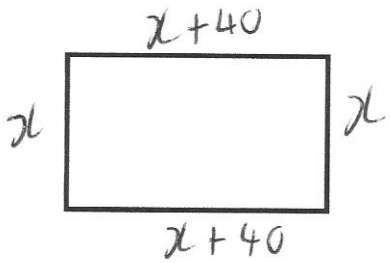
28 × 5 = 140

8 | 140.0 = 17.5

17.5cm

(3)

19. Below is a table top.



The length of the table is 40cm more than the width of the table.
The perimeter of the table top is 4.2 metres.

420 cm

Find the size of the length and width of the table.

$4x + 80 = 420$

$4x = 340$

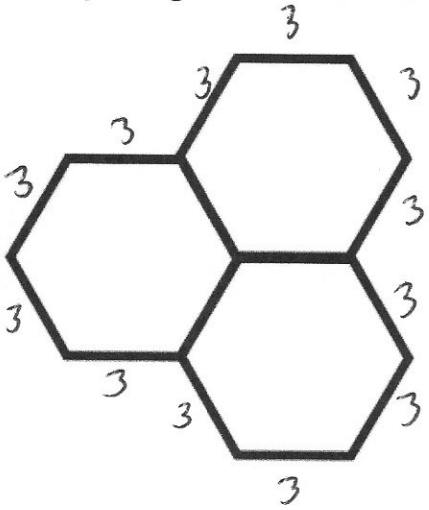
$x = 85$

length: 125 cm

width: 85 cm

(4)

20. Three regular hexagons are put together to make a larger shape.



The perimeter of one of the regular hexagons is 18cm.

Find the perimeter of the larger shape.

$18 \div 6 = 3cm$

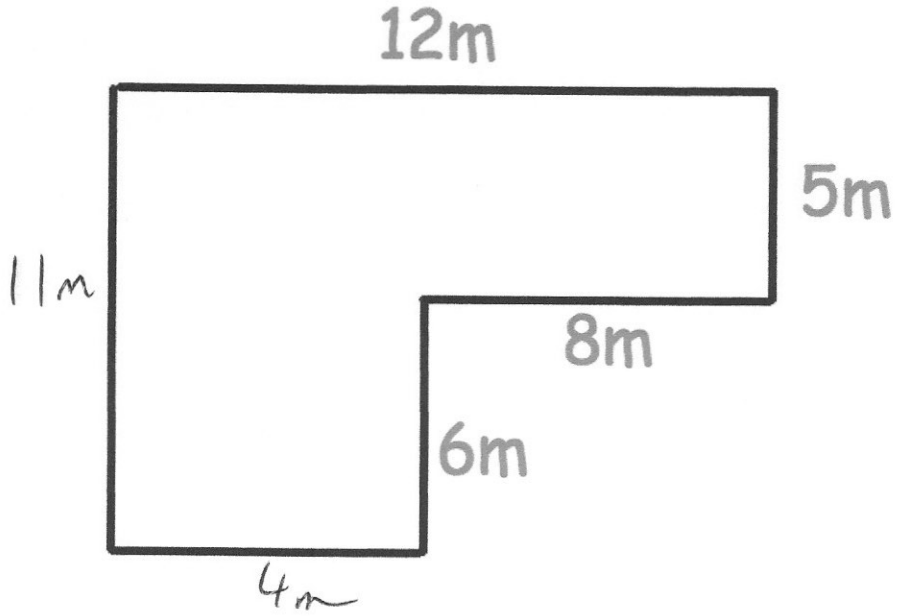
$12 \times 3 = 36cm$

36cm

.....

(3)

21. Mr Jones is a chicken farmer.



He wants to build a new fence around the chicken enclosure.
Each metre of fencing will cost £7.99

Work out the cost of the new fence.

$12 + 5 + 8 + 6 + 4 + 11 = 46m$

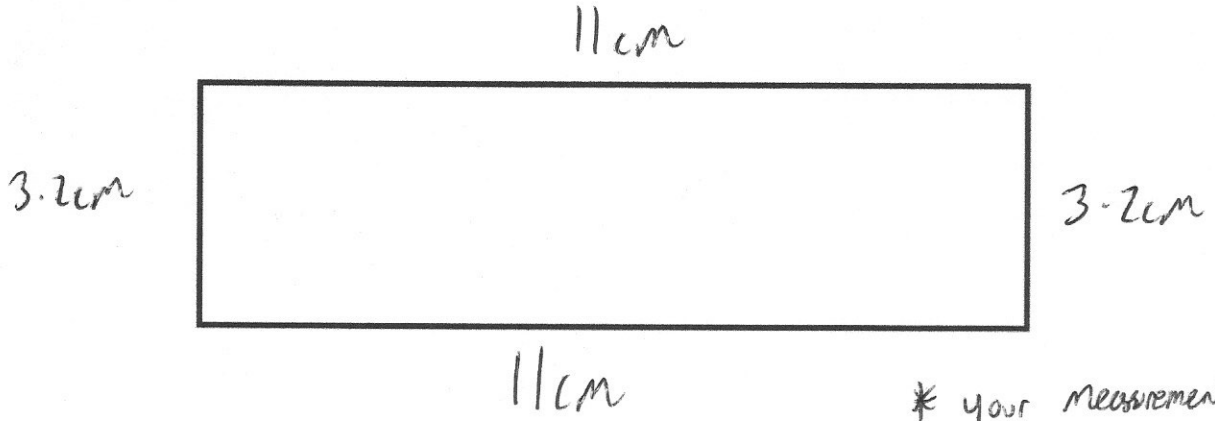
$46 \times 7.99 = £367.54$

£367.54

(4)

22. Shown below is a scale drawing of a field.

Scale: 1cm represents 200m



* your measurements may differ slightly due to printing scale.

Find the perimeter of the field.

$11 + 3.2 + 11 + 3.2 = 28.4$

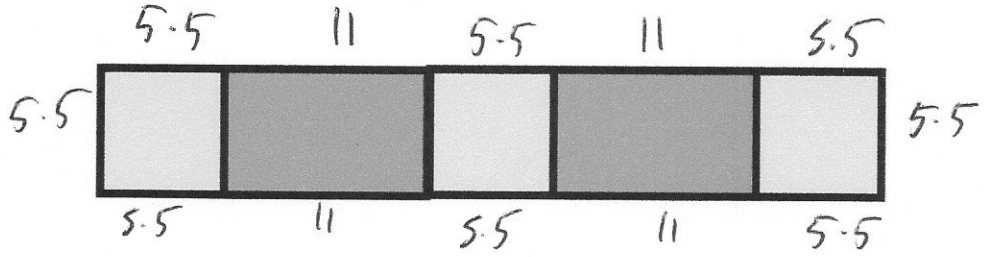
$28.4 \times 200 = 5680\text{m}$

5680m.

.....

(4)

23. A design is made from some identical rectangles and identical squares.



Each rectangle is twice as long as each square.
The perimeter of each square is 22cm.

Calculate the perimeter of the design.

22 ÷ 4 = 5.5cm

5.5 × 2 = 11cm

5.5 × 8 = 44

11 × 4 = 44

+

88

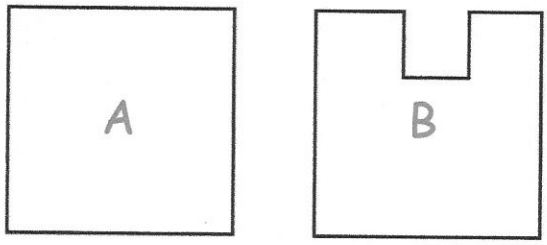
88

.....cm

(4)

24. Shown below is a square, A.

Noah removes a square from the top of A and labels the new shape B.



(a) Which of the following statements is correct?

Statement 1 The perimeter of B is greater than the perimeter of A

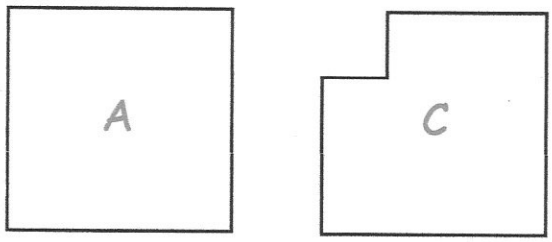
Statement 2 The perimeter of B is equal to the perimeter of A

Statement 3 The perimeter of B is less than the perimeter of A

Statement ...1...

(1)

Aoife rmoves a square from the corner of A and labels the new shape C.



(a) Which of the following statements is correct?

Statement 1 The perimeter of C is greater than the perimeter of A

Statement 2 The perimeter of C is equal to the perimeter of A

Statement 3 The perimeter of C is less than the perimeter of A

Statement ...2...

(1)

25. A rectangle has a perimeter of 18cm

The rectangle is enlarged by scale factor 3

What is the perimeter of the enlarged rectangle?

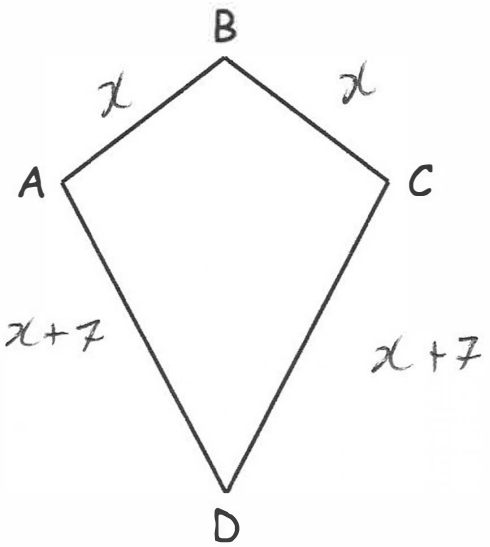
$18 \times 3 = 54$

54 .....cm

(1)

---

26. ABCD is a kite.



CD is 7cm longer than BC.

The perimeter of ABCD is 52cm.

Work out the length of CD.

$x + x + (x+7) + (x+7) = 52$

$4x + 14 = 52$

$4x = 38$

$x = 9.5$

$9.5 + 7 = 16.5$

16.5

.....cm

(4)