

Q1.

Solve $5x - 6 = 3x + 7$

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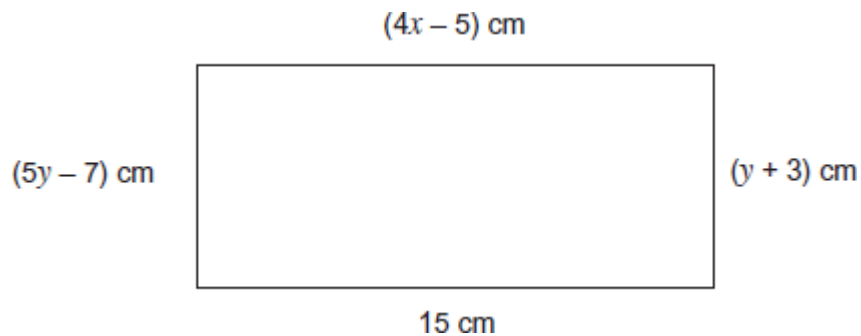
$x =$

(Total 3 marks)

Q2.

The diagram shows a rectangle.

Not drawn accurately



(a) Set up and solve an equation to work out the value of x .

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$x =$

(3)

(b) Work out the area of the rectangle.

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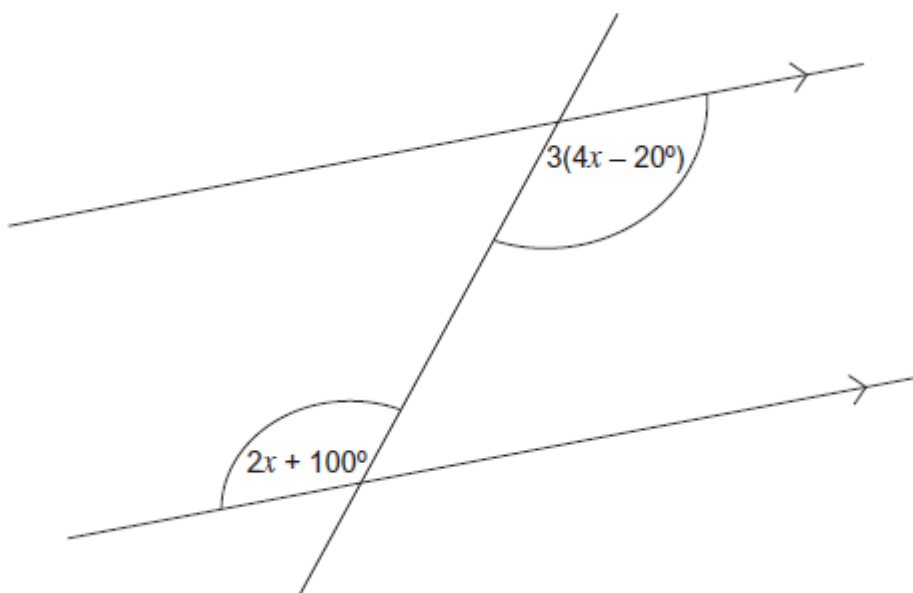
Answer cm²

(5)
(Total 8 marks)

Q3.

The diagram shows three straight lines.

Not drawn accurately



(a) Which of the following describes the pair of angles marked?
Circle your answer.

- Alternate Corresponding Interior Vertically opposite

(1)

(b) Work out the value of x .

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$x =$ degrees

(4)
(Total 5 marks)

Q4.

(a) Solve $6x + 4 = 2(2x - 5)$

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$x =$

(3)

(b) Multiply out $y(2 - y^3)$

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Answer

(2)
(Total 5 marks)

Q5.

Solve $6x - 11 = 4x + 7$

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$x =$

(Total 3 marks)

Q6. Solve $5x - 9 = 3x + 11$

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$x =$

(Total 3 marks)

Q7.(a) Factorise fully $4x^2 - 6xy$

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Answer

(2)

(b) Solve $\frac{2w - 1}{4} = 2 - w$

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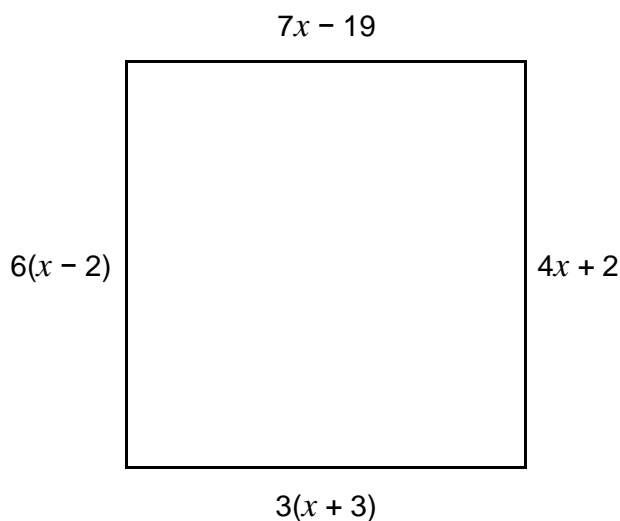
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$w = \dots\dots\dots$

(3)
 (Total 5 marks)

Q8. Show that **all** sides of this quadrilateral could be equal.

Not drawn accurately



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(Total 5 marks)

Q9.

Bag *A* contains $7x$ counters.

Bag *B* contains $2x$ counters.

Five counters are taken from Bag *A* and put in Bag *B*.

(a) Write an expression, in terms of x , for the number of counters now in bag *B*.

Answer.....

(1)

(b) The ratio of counters in bag *A* to bag *B* is now $8 : 3$

Use algebra to work out the **total** number of counters in the bags.

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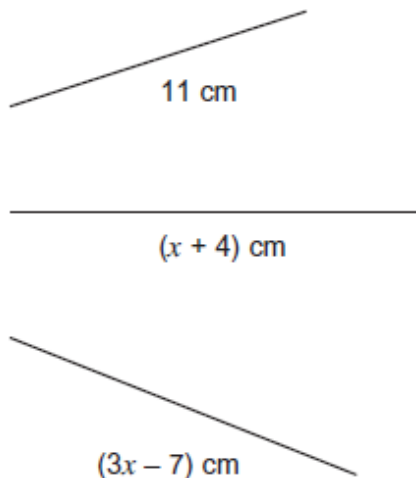
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Answer.....

(4)

(Total 5 marks)

Q10. The diagram shows three rods.



Not drawn accurately

Two of the rods are the same length.

Work out the **three** possible values for x .

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Answer 1 $x =$

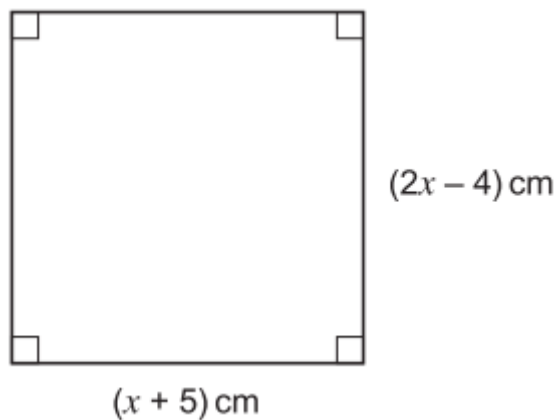
Answer 2 $x =$

Answer 3 $x =$

(Total 5 marks)

Q11. The diagram shows a square.

Not drawn accurately



Work out the perimeter of the square.

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Answer cm

(Total 5 marks)

Q12. Solve $3(x + 2) = 2x - 1$

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$x =$

(Total 3 marks)

