



Lite GCSE Maths

Linear Equations 1

Name: _____

Class: _____

Author:

Date:

Time: 32

Marks: 29

Comments:

Q1. In the magic square, the rows, columns and diagonals add to the same number.

10	w	x
5	y	9
6	11	4

Work out the values of w , x and y .

.....

.....

.....

Answer $w = \dots\dots\dots$ $x = \dots\dots\dots$ $y = \dots\dots\dots$

(Total 3 marks)

Q2. (a) If $x \diamond y$ means $2x + y$ find the value of $2 \diamond 8$

.....

Answer

(1)

(b) If $m \blacktriangledown n$ means $\frac{m+n}{2}$ find the value of $4 \blacktriangledown 10$

.....

Answer

(2)

(c) Simplify $6a + 7b - 2a + b$

.....

.....

Answer

(2)

(d) Solve the equation $5w + 6 = 9 - w$

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.....
.....
.....

Answer $w =$

(3)
(Total 8 marks)

Q3. (a) Solve the equation $\frac{x}{20} = -4$

.....

Answer $x =$

(1)

(b) Solve the equation $8w - 5 = 3w + 1$

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.....
.....
.....
.....

Answer $w =$

(3)

(c) Simplify $y + 2 \times y \times y$

.....

Answer

(1)

(d) Factorise $15t + 25$

.....

Answer

(1)

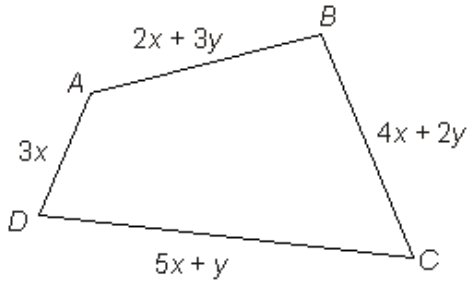
(e) Factorise $z^2 + 8z$

.....

Answer

(1)
(Total 7 marks)

Q4. $ABCD$ is a quadrilateral.



Not drawn accurately

(a) Write down an expression for the perimeter of the quadrilateral in terms of x and y . Simplify your answer.

.....
.....

Answer

(2)

(b) When $x = 4$ cm, the perimeter of the quadrilateral is 68 cm.

Find the value of y .

.....
.....
.....
.....

Answercm

(3)
(Total 5 marks)

Q5. (a) Solve the equation $\frac{x}{6} = 7$

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Answer $x =$

(1)

(b) Solve the equation $\frac{x+1}{2-3x} = 3$

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.....

.....

Answer $x =$

(3)

(Total 4 marks)

Q6. (a) You are given that $6x = 48$

Work out the value of $5x$

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.....

Answer

(2)

(b) Solve the equation $2(4y - 1) = 18$

.....

.....

.....

Answer $y =$

(3)

(Total 5 marks)

