1 (b) Solve 2x + 5 = -19

x = (2)

(Total for Question 1 is 2 marks)

2 (b) Solve x + 5 = 12

 $x = \dots$  (1)

(c) Solve 9y = 36

y = .....(1)

(Total for Question 2 is 2 marks)

3 (a) Solve 5(4-x) = 7 - 3xShow clear algebraic working.

 $x = \dots$  (3)

(Total for Question 3 is 3 marks)

**4** (b) Solve 4x + 5 = 27

 $x = \dots$  (2)

(Total for Question 4 is 2 marks)

5 (b) Solve  $(2x + 5)^2 = (2x + 3)(2x - 1)$ 

x = (3)

(Total for Question 5 is 3 marks)

6 (c) Solve 5x - 11 = x + 6Show clear algebraic working.

х	=	
		(3)

(Total for Question 6 is 3 marks)

7 Solve 5(2x - 3) = 20Show clear algebraic working.

*x* = .....

(Total for Question 7 is 3 marks)

8 (b) Solve 2n + 5 = 16

n =	
	(2)

(Total for Question 8 is 2 marks)

9 (b) Solve 
$$4 - 3x = \frac{5 - 8x}{4}$$

Show clear algebraic working.



(Total for Question 9 is 3 marks)

**10** (e) Solve x - 7 = 19

$$x = \dots$$
 (1)

$$18^2 + 15^2 - 5^3 = 4n$$

(f) Work out the value of n.

$$n = \dots (2)$$

(Total for Question 10 is 3 marks)

11 (a) Solve 
$$p = \frac{3p-5}{10}$$

Show clear algebraic working.

$$p = \dots (3)$$

(Total for Question 11 is 3 marks)

**12** (c) Solve 
$$\frac{c}{3} = 9$$

 $c = \dots$ 

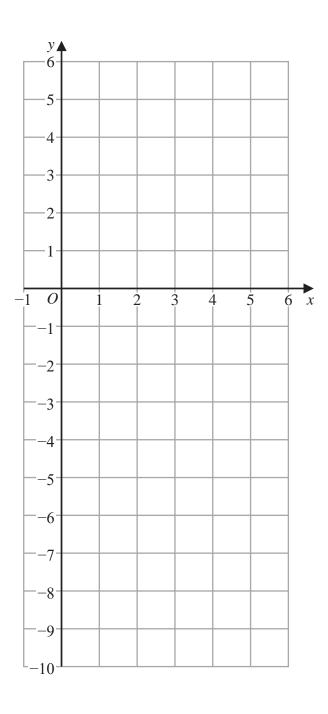
(Total for Question 12 is 1 marks)

13 (c) Solve 4p + 9 = 24

$$p = \dots (2)$$

(Total for Question 13 is 2 marks)

14 On the grid, draw the graph of y = -2x + 3 for values of x from -1 to 5



(Total for Question 14 is 3 marks)

**15** (b) Solve 
$$2x - 3 = \frac{3x - 5}{4}$$

Show clear algebraic working.



(Total for Question 15 is 3 marks)

16	3 cups each contain 200 millilitres of water.
	4 jugs each contain <i>x</i> millilitres of water.

Emma pours all the water from the 3 cups and the 4 jugs into a container. The total amount of water that Emma pours into the container from the 3 cups and 4 jugs is 3.5 litres.

Work out the value of x

x =	 

(Total for Question 16 is 4 marks)

17 Larry is a delivery man.

He has 7 parcels to deliver. The mean weight of the 7 parcels is 2.7 kg

Larry delivers 3 of the parcels. Each of these 3 parcels has a weight of  $W \log W$ 

The mean weight of the other 4 parcels is 3.3 kg

Work out the value of W

TTT	_			
W	_			

(Total for Question 17 is 3 marks)

18 (c) Solve 5r - 3 = 8

 $r = \dots$  (2)

(Total for Question 18 is 2 marks)

**19** (a) Solve 5c = 15

(Total for Question 19 is 1 marks)

**20** (b) Solve 
$$6x-5 = \frac{4x-7}{2}$$

Show clear algebraic working.



(Total for Question 20 is 3 marks)

**21** (a) Solve 5x = 30

 $x = \dots$  (1)

(b) Solve y - 7 = 12

y = .....(1)

(2)

(Total for Question 21 is 2 marks)

**22** (c) Solve 7x = 42

$$x = \dots$$
 (1)

(d) Solve n + 6 = 5

(Total for Question 22 is 2 marks)

23 (d) Solve 7g + 3 = 2g - 5Show clear algebraic working.



(Total for Question 23 is 3 marks)

**24** (c) Solve 2d + 7 = 16

d =		
	(2)	

(Total for Question 24 is 2 marks)

25 Solve 3(2-4x) = 5-8xShow clear algebraic working.

*x* = .....

(Total for Question 25 is 3 marks)

**26** (b) Solve 5 + x = 12

 $x = \dots$  (1)

(c) Solve  $\frac{y}{6} = 3$ 

y = .....(1)

(Total for Question 26 is 2 marks)

27 The diagram shows rectangle ABCD

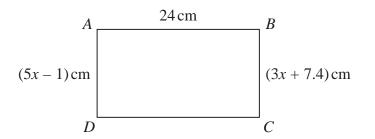


Diagram **NOT** accurately drawn

Work out the perimeter of the rectangle. Show your working clearly.

..... cm

(Total for Question 27 is 4 marks)

**28** (c) Solve 4x - 7 = 23

x =	
	(2)

(Total for Question 28 is 2 marks)

**29** (c) Solve 13 - x = 7

$$x = \dots$$
 (1)

(d) Solve 4y + 7 = 43

$$y = \dots (2)$$

(Total for Question 29 is 3 marks)

**30** ABCD is a trapezium.

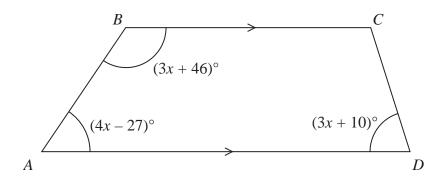


Diagram **NOT** accurately drawn

BC is parallel to AD

Find the size of the largest angle inside the trapezium.

С