

1. Here is an arithmetic sequence.

$$-1, 1, 3, 5, 7, \dots, 9, 11$$

(i) Write down the next two terms

$$\dots\dots\dots 2n - 3$$

(ii) What is the Nth term

$$\dots\dots\dots 97$$

(iii) What is the 50th term in the sequence

(5 marks)

2.

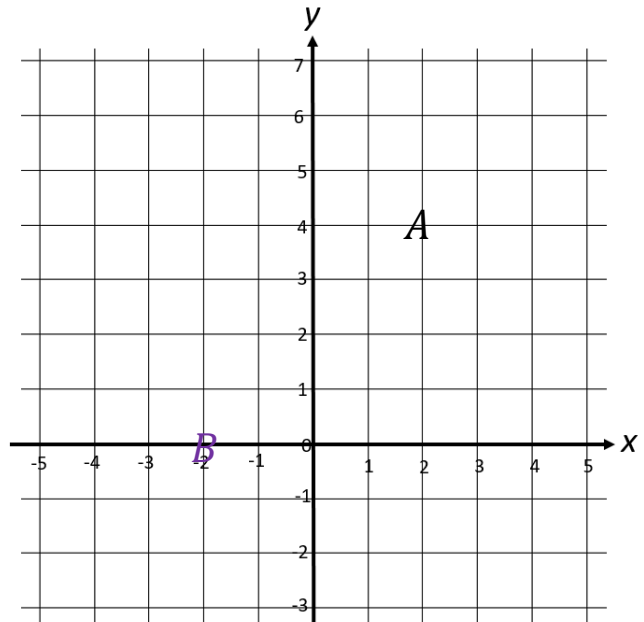
(a) Write down the coordinate A

$$\dots\dots\dots (2, 4)$$

(b) Plot the coordinate B (-2, 0)

(c) Write down the midpoint of AB

$$\dots\dots\dots (0, 2)$$



(4 marks)

3. Simplify $5a + 4b + 7 - 2a + 3b + 8$

$$\dots\dots\dots 3a + 7b + 15$$

(2 marks)

4. Simplify $8a \times a \times 3b$

$$\dots\dots\dots 24a^2b$$

(1 mark)

5. $a = 4$ $b = 0.5$ $c = -1$

Work out the value of $a^2 + 8b - 2c$

$$\dots\dots\dots 22$$

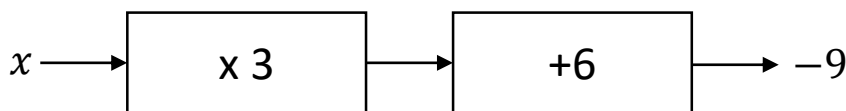
(2 marks)

6. Simplify $(4y^5)^2$

$$\dots\dots\dots 16y^{10}$$

(2 marks)

7. Calculate



$x = \dots\dots\dots -5$
(1 mark)

8. Simplify $5n^3 + 4n^3 - 3n^3$

$\dots\dots\dots 6n^3$
(1 mark)

9. Expand $x(2x + 3)$

$\dots\dots\dots 2x^2 + 3x$
(1 mark)

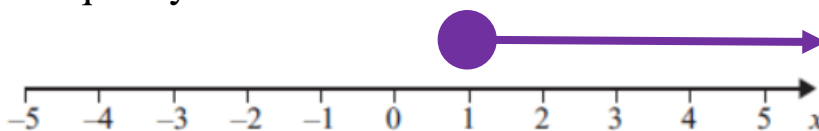
10. Factorise $x^2 + 2x$

$\dots\dots\dots x(x + 2)$
(2 marks)

11. Solve $3x - 2 = 25$

$x = \dots\dots\dots 9$
(2 marks)

12. Show the inequality $x - 1 \geq 0$ on the number line below.

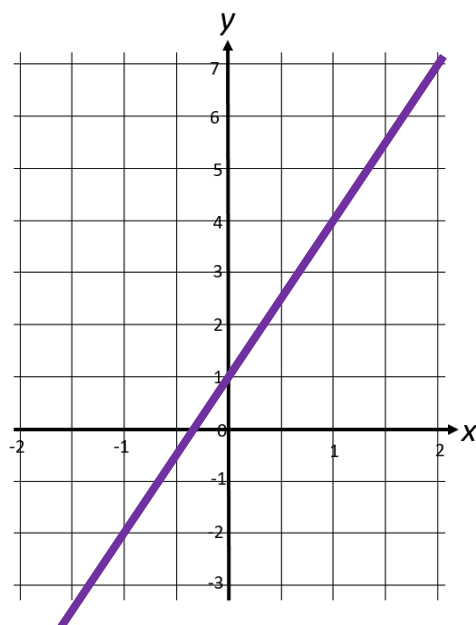


(2 marks)

13. Complete the table of values for $y = 3x + 1$

x	-2	-1	0	1	2
y	-5	-2	1	4	7

On the grid draw the graph of $y = 3x + 1$



(4 marks)

Score =