

1. Here is an arithmetic sequence.

$$5, 9, 13, 17, 21, 25, 29, \dots$$

(i) Write down the next two terms

..... $4n + 1$

(ii) What is the Nth term

..... 81

(iii) What is the 20th term in the sequence

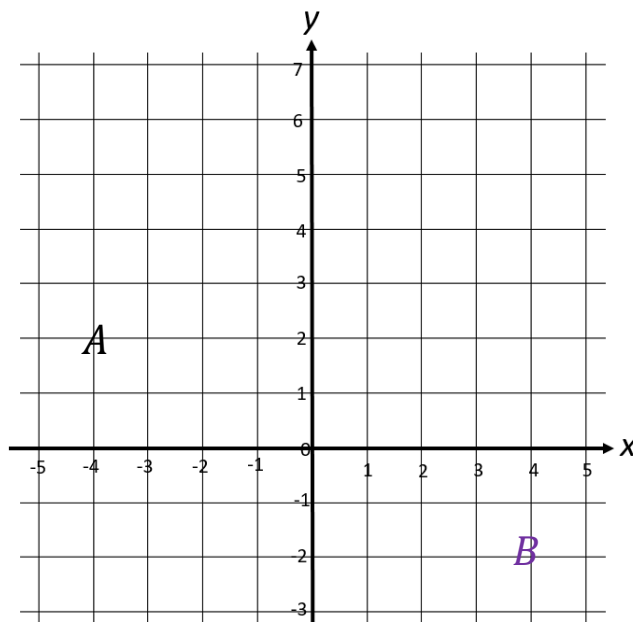
(5 marks)

2.

(a) Write down the coordinate A

..... $(-4, 2)$

(b) Plot the coordinate (4 , -2)



(2 marks)

3. Simplify $2a + 3a^2 + 4a + 6a^2$

..... $6a + 9a^2$

(1 mark)

4. Simplify $6 \times h \times g \times h \times 5$

..... $30gh^2$

(1 mark)

5. $a = 6$ $b = 3$ $c = -2$

Work out the value of $5b - 4c$

..... 38

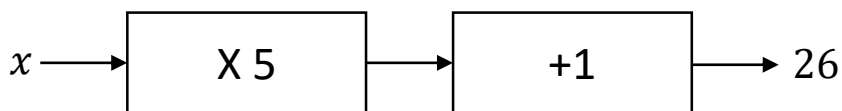
(2 marks)

6. Simplify $\frac{8w^{12}}{2w^3}$

..... $4w^9$

(1 mark)

7. Calculate



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

8. Simplify $m^4 + m^4 + m^4$

$\dots\dots\dots 3m^4$
(1 mark)

9. Expand $3(2x - 5)$

$\dots\dots\dots 6x - 15$
(1 mark)

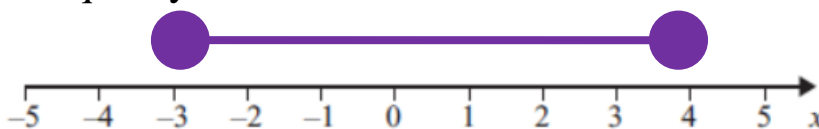
10. Factorise $6x - 15$

$\dots\dots\dots 3(2x - 5)$
(2 marks)

11. Solve $2x + 3 = 11$

$x = \dots\dots\dots 4$
(2 marks)

12. Show the inequality $-3 \leq x \leq 4$ on the number line below.

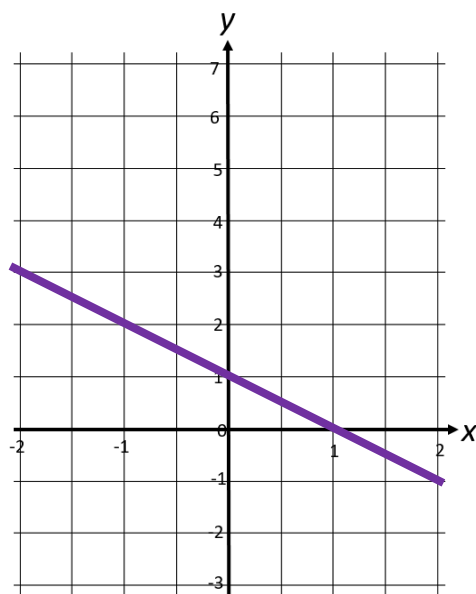


(2 marks)

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

x	-2	-1	0	1	2
y	3	2	1	0	-1

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



(4 marks)

Score =