

1. Here is an arithmetic sequence.

4, 7, 10, 13, 16, **19, 22**

(i) Write down the next two terms

Add 3

(ii) What is the rule

$3n + 1$

(iii) What is the Nth term

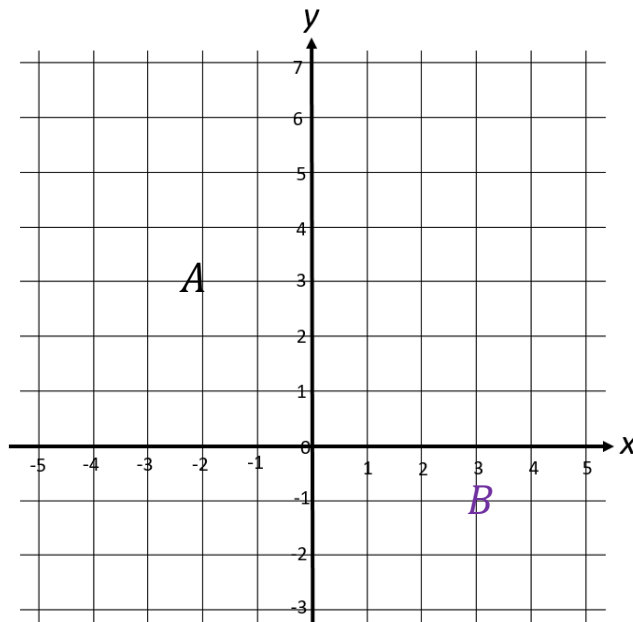
(3 marks)

2.

(a) Write down the coordinate A

$(-2, 3)$

(b) Plot the coordinate (3, -1)



(2 marks)

3. Simplify $4e + e + 2e - 3e$

$4e$

(1 mark)

4. Simplify $6 \times e \times f \times 4 \times g$

$24efg$

(1 mark)

5. $a = 3$ $b = 4$ $c = 5$

Work out the value of $a^2 + 2b - 3c$

2

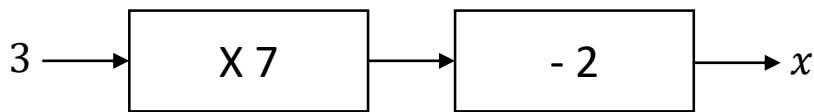
(2 marks)

6. Simplify $2a^4 \times 3a^5$

$6a^9$

(1 mark)

7. Calculate



$x = \dots\dots\dots 19$
(1 mark)

8. Simplify $h \times h \times h \times h \times h$

$\dots\dots\dots h^5$
(1 mark)

9. Expand $5(x - 3)$

$\dots\dots\dots 5x - 15$
(1 mark)

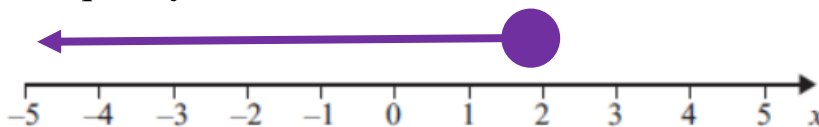
10. Factorise $12a + 6$

$\dots\dots\dots 6(2a + 1)$
(2 marks)

11. Solve $4x = 24$

$x = \dots\dots\dots 6$
(1 mark)

12. Show the inequality $x \leq 2$ on the number line below.

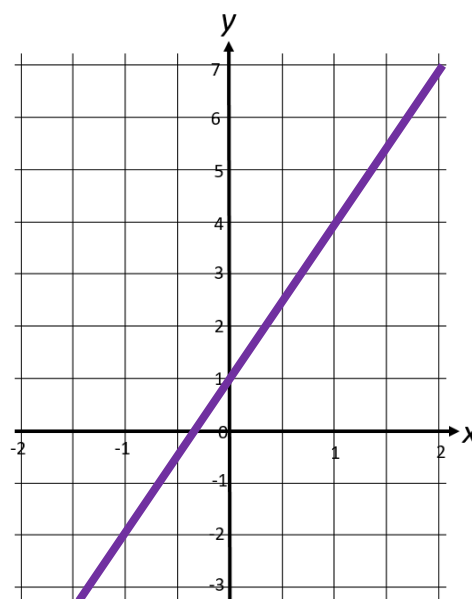


(1 mark)

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 =