

1. Here is an arithmetic sequence.

$$7, 12, 17, 22, 27, \dots, \dots$$

(i) Write down the next two terms

(ii) What is the rule

(iii) What is the Nth term

.....

.....

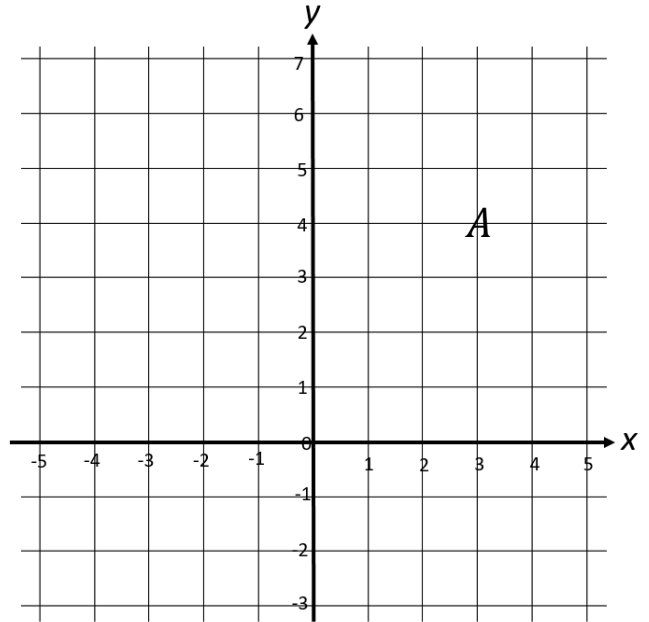
(3 marks)

2.

(a) Write down the coordinate A

.....

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



(2 marks)

3. Simplify $2a + 3b + a + 4b$

.....

(1 mark)

4. Simplify $4 \times r \times r \times 7 \times s$

.....

(1 mark)

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

Work out the value of $5a + 2c$

.....

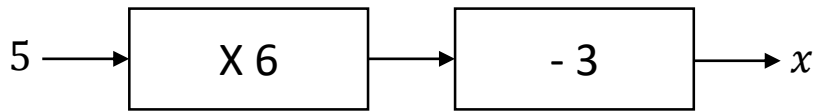
(2 marks)

6. Simplify $\frac{f^{10}}{f^2}$

.....

(1 mark)

7. Calculate



$x = \dots\dots\dots$

(1 mark)

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

$\dots\dots\dots$

(1 mark)

9. Expand $3(2x + 4)$

$\dots\dots\dots$

(1 mark)

10. Factorise $15a - 5$

$\dots\dots\dots$

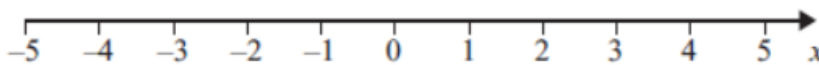
(2 marks)

11. Solve $3x = 24$

$x = \dots\dots\dots$

(1 mark)

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

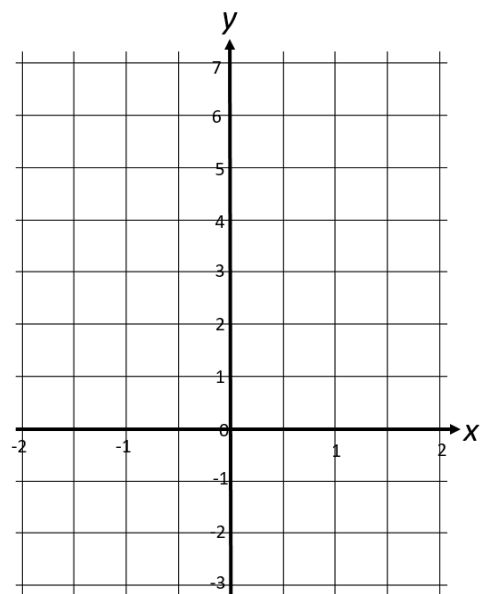


(1 mark)

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

x	-2	-1	0	1	2
y					

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



(4 marks)

Score =