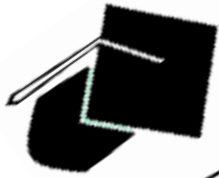


1. Here is a quadratic sequence.

3, 10, 21, 36, 55,



(1) Find the n th term.
(3 marks)

2. Coordinates of point A are $(-1, 2)$ and coordinate B = $(-9, -8)$.
Write down the length of AB.
(2 marks)

3. Simplify $2x + 3x^2 - 4x^2 + 5x$
(2 marks)

4. Simplify $6p^5 + 7p^5 - 2p^5$
(1 mark)

5. $a = 5$ $b = 3$ $c = -2$
Work out the value of $ab + 2c$
(2 marks)

6. Simplify $6c^2d^6 \times 9c^5b$
(2 marks)

7. Simplify $\frac{18m^9n^6}{3mn^{-3}}$
(2 marks)

8. Simplify $(12t^{-9})^2$
(2 marks)

9. Simplify $\frac{6a^4 \times 2a^6}{3a^2}$
(2 marks)

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10. Expand $xy(7x + 5y)$

.....
(2 marks)

11. $-35p^2$

.....
(2 marks)

12. Expand $(2x + 2)(x - 5)$

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(2 marks)

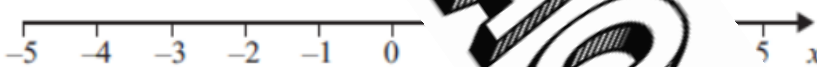
13. Factorise $2x^2 - 10x + 12$

account
(2 marks)

14. Solve $4x - 7 = 23$

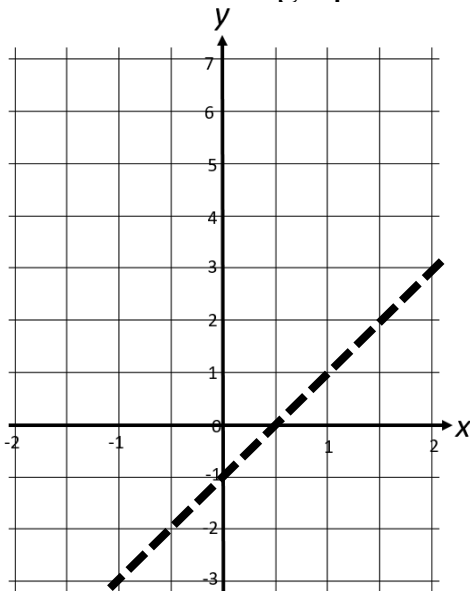
$x = \dots\dots\dots$
(2 marks)

15. Show the inequality $-1 \leq x$ on the number line below.



.....
(2 marks)

16. Below is a linear graph.



(i) Write down the gradient.

.....

(ii) Write down the y-intercept.

.....

(iii) Write down the equation of the line.

.....

.....
(2 marks)

Score =