

1. Here is a quadratic sequence.

7, 18, 35, 58, 87,

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

2. Coordinates of point A are $(-1, 3)$ and coordinate B = (x, y) .
The midpoint of AB is $(2, 5)$.
Write down the coordinates of B.
my TES (2 marks)
account

3. Simplify $3x^2 - 5x^2 + 7x^2$
(2 marks)

4. Simplify $4x^4 - 7x^4 + 9x^4$
(1 mark)

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

6. Simplify $3a^2bc^{-5} \times 13a^5b^3c$
(3 marks)

7. Simplify $\frac{24d^6e^{-4}f}{4de^2f^{-2}}$
(2 marks)

8. Simplify $(6x^{-9})^3$

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

10. Expand $6ef(9e - 3ef)$

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(2 marks)

11.  $- 35h^2$

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(2 marks)

12. Expand $(2x - 1)^2$

Available from
my TES
(2 marks)

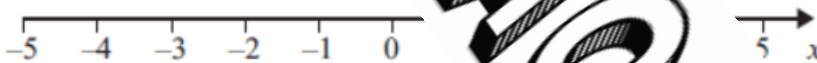
13. Factorise $3x^2 - 12x + 12$

account
(2 marks)

14. Solve $3x - 2 = 4$

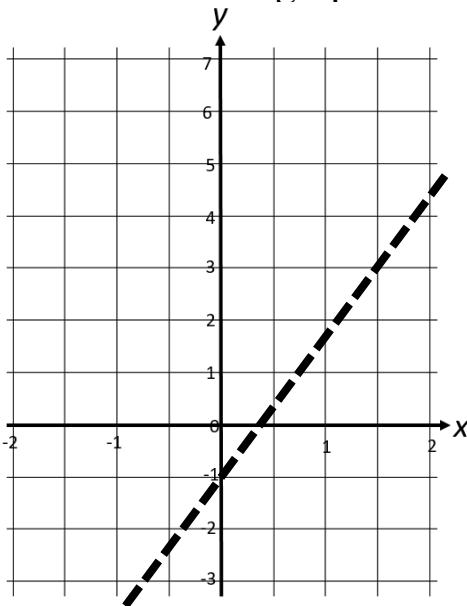
$x =$
(2 marks)

15. Show the inequality $-5 \leq 2x + 1 < 5$ on a number line below.



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(2 marks)

16. Below is a linear graph.



(i) Write down the gradient.

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(ii) Write down the y-intercept.

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(iii) Write down the equation of the line.

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(2 marks)

Score =