

| Question                                         | Workings (where necessary) and answer | Marks |
|--------------------------------------------------|---------------------------------------|-------|
| <b>Section 1: Simplifying</b>                    |                                       |       |
| 1. Simplify<br>$x^2 - 4x + x + 4$                |                                       | 1     |
| 2. Simplify<br>$7x + 5y - (4x - 2y)$             |                                       | 1     |
| 3. Simplify<br>$5x^4y \times (2x^2y)^3$          |                                       | 1     |
| <b>Section 2: Expanding</b>                      |                                       |       |
| 4. Expand<br>$5x(9y - 12x)$                      |                                       | 1     |
| 5. Expand<br>$(x - 8)(x - 1)$                    |                                       | 1     |
| 6. Expand<br>$(3x + 4)(2x - 7)$                  |                                       | 1     |
| <b>Section 3: Factorising</b>                    |                                       |       |
| 7. Factorise<br>$12x^2 - 8x^3$                   |                                       | 1     |
| 8. Factorise<br>$x^2 - 11x + 18$                 |                                       | 1     |
| 9. Factorise<br>$x^2 - 64$                       |                                       | 1     |
| <b>Section 4: Solving</b>                        |                                       |       |
| 10. Solve<br>$x - 30 = 11x - 10$                 |                                       | 1     |
| 11. Solve<br>$14x - 3 = 3x - 5(x - 1)$           |                                       | 1     |
| 12. Solve<br>$\frac{7x - 1}{3} = 3x - 5$         |                                       | 1     |
| <b>Section 5: Number</b>                         |                                       |       |
| 13. Evaluate<br>$\sqrt[3]{125} + 2^4$            |                                       | 1     |
| 14. Evaluate when $x = 3$<br>$x^3 - 2x^2$        |                                       | 1     |
| 15. Evaluate when $x = -2$<br>$2x^3 + 3x^2 - 5x$ |                                       | 1     |

This assessment tests basic maths skills that are **essential** prerequisites for the study of A level maths.

Check your work carefully.