Extra Content for Foundation GCSE

87. Basic Algebraic Manipulation (a × b = ab, a + a = 2a, a², etc.)

Practice Questions

1. Simplify $5 \times a$.

2. Simplify $b \times 7 \times c$.

3. Write $a + a + a$ in a simplified form.

4. Expand $4 \times (x + 3)$.

5. Simplify $3x \times 2y$.

6. Expand $(a + 5)(b)$.

7. If $m = 6$, find the value of m^2.

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

9. Factorise $6a + 9b$.

10. Write $x \times x \times x$ using indices.

Scenario Questions

1. A rectangular field has a length of x and a width of $2x$. Write an expression for the area.

2. A rope is 3 times as long as another rope y. Write an expression for the total length.

3. A shop sells b books and $3b$ pens. Write an expression for the total number of items.

4. The cost of x apples is £2 per apple. Write an expression for the total cost.

5. A square has sides of length a. Write an expression for its area.

6. A farmer has p pigs and 5 times as many chickens. Write an expression for the total number of animals.

7. A rectangle has a width of $3m$ and a length of $4x$. Write an expression for its perimeter.

8. A company has $2n$ employees in one office and $5n$ in another. Write an expression for the total number of employees.

9. A triangle has a base of x and a height of $2x$. Write an expression for its area.

10. A school orders $3x$ pencils and $2x$ pens. Write an expression for the total number of stationery items.

Extra Content for Foundation GCSE

87. Basic Algebraic Manipulation (a × b = ab, a + a = 2a, a², etc.)

Practice Questions

1. $5a$
2. $7bc$
3. $3a$
4. $4x + 12$
5. $6xy$
6. $ab + 5b$
7. 36
8. $6x + 8$
9. $3(2a + 3b)$
10. x^3

Scenario Questions

1. $2x^2$
2. $4y$
3. $4b$
4. x (assuming the cost per apple is £1)
5. a^2
6. $6p$
7. $8x + 6m$
8. $7n$
9. x^2
10. $5x$