

**Simplifying Expressions**

Simplify the following expressions.

1.  $3x + 5x + 4$

2.  $2x + 3y - 5x - y$

3.  $6y^2 + 3y - 10y^2$

4.  $4a - 5a^2 + 6a^3$

5.  $2a \times 6$

6.  $5a \times 6a$

7.  $3a^2 \times 6a$

8.  $\frac{9y}{3}$

9.  $\frac{12y}{8y}$

10.  $\frac{4y^6}{8y^2}$

## Simplifying Expressions II

Simplify the following expressions.

1.  $3x^2 + 5 - 6x^2$

2.  $2ab + 2ac + 2bc + 2$

3.  $-4y^4 - 3y^4$

4.  $2a \times^{-} 3b \times^{-} 4c$

5.  $2ab \times 3ab$

6.  $\frac{15y^3}{9y}$

7.  $\frac{6y}{15y^4}$

**Expand** (write without brackets)

8.  $2(a + 5)$

9.  $5(y - 4)$

10.  $-3(a + 6)$

**Challenge!**

Expand  $-3y^3(2y^2 - 5y)$

## Simplifying Expressions III

### Simplify

1.  $-4x^2 + 5x - 6x^2$

2.  $2ab - 8ac + 5ac + 5$

3.  $-6y^4 - 9y^4$

4.  $2a \times^{-} 3a \times^{-} 4a$

5.  $6mn \times mn$

6.  $\frac{18y^6}{12y^2}$

### Expand

7.  $2a(a - 5)$

8.  $5y^3(y^2 + 4y)$

### Factorise completely

9.  $12c - 18$

10.  $6y^2 - 9y$

### Simplify

11.  $\frac{5y}{2} - \frac{7y}{5}$

12.  $\frac{5y}{2} \div \frac{5y}{8}$