

# Class 9 Mathematics - Exploring Algebraic Identities

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Advanced Worksheet 3

### Questions

1. Expand  $(a + b)^3$ .
2. Expand  $(x + 2)^3$ .
3. Expand  $(2m + n)^3$ .
4. Expand  $(p - q)^3$ .
5. Expand  $(x - 3)^3$ .
6. Expand  $(3a - b)^3$ .

### Answer Key

1.  $a^3 + 3a^2b + 3ab^2 + b^3$
2.  $x^3 + 6x^2 + 12x + 8$
3.  $8m^3 + 12m^2n + 6mn^2 + n^3$
4.  $p^3 - 3p^2q + 3pq^2 - q^3$
5.  $x^3 - 9x^2 + 27x - 27$
6.  $27a^3 - 27a^2b + 9ab^2 - b^3$