

Class 9 Mathematics - Exploring Algebraic Identities

Name: _____

Date: _____

Advanced Worksheet 4

Questions

1. Factorise: $x^3 - 8$
2. Factorise: $a^3 + 27$
3. Factorise: $8m^3 - n^3$
4. Factorise: $27p^3 + q^3$
5. Factorise: $64x^3 - 125y^3$
6. Factorise: $125a^3 + 216b^3$

Answer Key

1. $(x - 2)(x^2 + 2x + 4)$
2. $(a + 3)(a^2 - 3a + 9)$
3. $(2m - n)(4m^2 + 2mn + n^2)$
4. $(3p + q)(9p^2 - 3pq + q^2)$
5. $(4x - 5y)(16x^2 + 20xy + 25y^2)$
6. $(5a + 6b)(25a^2 - 30ab + 36b^2)$