



Factor Polynomials (Order 3) - Sum of Cubes (No Hint), Coefficient N

1 Use the sum of cubes formula to factor this polynomial

$$64t^3 - 216$$

A $(4t + 6)(16t^2 - 24t + 36)$

B $(4t - 6)(16t^2 + 24t - 36)$

2 Use the sum of cubes formula to factor this polynomial

$$216n^3 - 8$$

A $(6n - 2)(36n^2 + 12n - 4)$

B $(2n + 4)(36n^2 + 12n + 2)$

3 Use the sum of cubes formula to factor this polynomial

$$125n^3 - 27$$

A $(5n + 125)(25n^2 - 15n + 9)$

B $(5n - 3)(25n^2 + 15n - 9)$

4 Use the sum of cubes formula to factor this polynomial

$$8m^3 + 8$$

A $(2m + 4)(4m^2 + 4m + 2)$

B $(2m + 2)(4m^2 - 4m + 4)$

5 Use the sum of cubes formula to factor this polynomial

$$125z^3 + 64$$

A $(5z + 125)(25z^2 - 20z + 16)$

B $(5z + 4)(25z^2 - 20z + 16)$

6 Use the sum of cubes formula to factor this polynomial

$$8m^3 + 125$$

A $(2m + 5)(4m^2 - 10m + 25)$

B $(5m + 4)(4m^2 - 10m + 25)$

7 Use the sum of cubes formula to factor this polynomial

$$64x^3 - 125$$

A $(4x + 5)(20x^2 - 16x + 25)$

B $(4x - 5)(16x^2 + 20x - 25)$

8 Use the sum of cubes formula to factor this polynomial

$$216q^3 + 64$$

A $(6q + 4)(36q^2 - 24q + 16)$

B $(6q + 4)(24q^2 - 36q + 16)$