

## mobius

## Factor Polynomials (Order 3) - Sum of Cubes (No Hint), Coefficient 1



1

Use the sum of cubes formula to factor this polynomial

 $n^3 + 64$ 

$$(n-4)(n^2-4n+16)$$

$$(n+4)(n^2-4n+16)$$

2

 $t^3 - 27$ 

Use the sum of cubes formula to factor this polynomial

27 (t + 3)(t<sup>2</sup> + 3t - 9)

$$(t-3)(t^2+3t-9)$$

3

Use the sum of cubes formula to factor this polynomial

 $z^{3} + 27$ 

$$(z+3)(z^2-3z+9)$$

$$(z-3)(z^2-3z+9)$$

4

 $z^3 - 64$ 

Use the sum of cubes formula to factor this polynomial

 $(z-4)(z^2+4z-16)$ 

$$(z-4)(z^2-4z+16)$$

5

Use the sum of cubes formula to factor this polynomial

 $r^3 + 64$ 

$$(r+4)(r^2-4r+16)$$

$$(r-3)(r^2-4r+16)$$

6

 $t^{3} - 216$ 

Use the sum of cubes formula to factor this polynomial

 $(t-6)(t^2+6t-36)$ 

$$(t+6)(t^2+6t-36)$$

Use the sum of cubes formula to factor this polynomial

$$w^3 - 125$$

 $(w+5)(w^2+5w-25)$ 

$$(w-5)(w^2+5w-25)$$

8

 $r^{3} + 27$ 

Use the sum of cubes formula to factor this polynomial

 $-27_{rac{A}{(r+3)(3r^2+3r-9)}}$ 

$$(r+3)(r^2-3r+9)$$