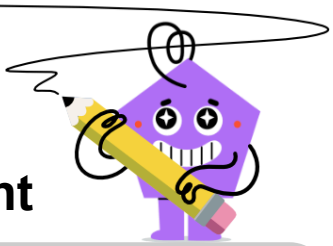
Name

Factor Polynomials (Order 3) - By Grouping to Order 1 Factors, Coefficient 1



1 Use grouping to factor this order 3 polynomial fully

$$y^3 + 2y^2 - 49y - 98$$

A $(y-2)(y-7)(y+7)$

B $(y+2)(y-7)(y+7)$

2 Use grouping to factor this order 3 polynomial fully

$$q^3 - 9q^2 - 16q + 144$$

A $(q-9)(q+4)(q-4)$

B $(q+9)(q+4)(q-4)$

3 Use grouping to factor this order 3 polynomial fully

$$x^3 - 6x^2 - 25x + 150$$

A $(x-6)(x-5)(x+5)$

B $(x-6)(x+5)(x+5)$

4 Use grouping to factor this order 3 polynomial fully

$$x^3 - 6x^2 - 9x + 54$$

A $(x-6)(x+3)(x-3)$

B $(x-6)(x+3)(x+3)$

5 Use grouping to factor this order 3 polynomial fully

$$m^3 - 2m^2 - 36m + 72$$

A $(m-2)(m+6)(m+6)$

B $(m-2)(m-6)(m+6)$

6 Use grouping to factor this order 3 polynomial fully

$$q^3 - 6q^2 - 16q + 96$$

A $(q-6)(q-4)(q+4)$

B $(q-6)(q+4)(q+4)$

7 Use grouping to factor this order 3 polynomial fully

$$n^3 - 4n^2 - 9n + 36$$

A $(n+4)(n+3)(n-3)$

B $(n-4)(n+3)(n-3)$

8 Use grouping to factor this order 3 polynomial fully

$$p^3 + 4p^2 - 36p - 144$$

A $(p+4)(p-6)(p+6)$

B $(p-4)(p-6)(p+6)$