



Factor Polynomials (Order 3) - By Grouping, Order 2 Factors to Order 1

Factors, Coefficient 1

1 Factor the 2nd order polynomial to give three binomial factors

$$(m + 7)(m^2 - 16)$$

A $(m - 7)(m + 4)(m - 4)$

B $(m + 7)(m - 4)(m + 4)$

3 Factor the 2nd order polynomial to give three binomial factors $(t + 6)(t^2 - 16)$

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

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

5 Factor the 2nd order polynomial to give three binomial factors $(w - 7)(w^2 - 9)$

A $(w - 7)(w + 3)(w + 3)$

B $(w - 7)(w + 3)(w - 3)$

7 Factor the 2nd order polynomial to give three binomial factors $(y - 5)(y^2 - 16)$

A $(y - 5)(y - 4)(y - 4)$

B $(y - 5)(y - 4)(y + 4)$

2 Factor the 2nd order polynomial to give three binomial factors $(w - 2)(w^2 - 49)$

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

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

4 Factor the 2nd order polynomial to give three binomial factors $(w + 7)(w^2 - 9)$

A $(w + 7)(w - 3)(w - 3)$

B $(w + 7)(w - 3)(w + 3)$

6 Factor the 2nd order polynomial to give three binomial factors $(n + 2)(n^2 - 49)$

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

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

8 Factor the 2nd order polynomial to give three binomial factors $(r + 4)(r^2 - 9)$

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

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