# FACTORING BY GROUPING

Here are some examples to factor using the grouping method.

1) $x^3 - x^2 + 2x - 2$

2) $x^3 + 5x^2 - 5x - 25$

3) $x^2 - ax + cx - ac$

4) $5x^3 - 10x^2 + 3x - 6$

5) $x^3 - 4x^2 + 6x - 24$

6) $x^2 + 2xy + y^2 - z^2$

7) $10x^3 + 8x^2 + 15xy + 12y$

8) $2x^3 - 10x^2 + 4x - 20$

9) $3x^2 + xy - 3xz - yz$

10) $x^2 - y^2 + 2yz - z^2$

11) $x^2 + 2xy + y^2 - 16z^2$

12) $x^5 + x^2 - 4x^3 - 4$

13) $6a^3 + 2a^2b + 21a^2 + 7ab + 15a + 5b$

14) $x^2 + 2xy + y^2 + 2x + 2y + 1$

15) $20a^3 + 5a^2b - 68a^2 - 17ab + 24a + 6b$

16) $6x^2 + 12xy + 6y^2 - 7x - 7y - 5$