

Exercises — Factoring polynomials

Factor the following polynomials:

1. $x^2 + x$

2. $x^3 + x^2 + x$

3. $4x^3 - 3x^2 + 5x$

4. $x^2 - 36$

5. $4x^2 - 100$

6. $3x^3 - 75x$

7. $x^2 + 6x + 9$

8. $x^2 - 8x + 16$

9. $x^2 + 3x - 10$

10. $x^3 + 7x^2 + 12x$

11. $x^3y - y^3x$

12. $5x^2y^2 + 3xy^3 + xy^2$

13. $\sqrt{5}x^3y + \pi yx^2$

14. $36 + 12x + x^2$

15. $x^3 - 27$

16. $x^4 - 27x$