Factoring Polynomials

No Calculator

Khan Academy Link: https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-quadratics-1/v/factoring-polynomials-1

Factor the following polynomials into binomials

1. $x^2 + 2x + 1$
2. $x^2 + 11x + 28$
3. $x^2 + 13x + 36$
4. $x^2 - 18x + 81$
5. $x^2 + 18x + 81$
6. $x^2 + 4x + 3$
7. $x^2 + 3x + 2$
8. $x^2 + 6x + 5$
9. $x^2 - 3x - 28$
10. $x^2 + 8x + 12$
11. $x^2 + 11x + 18$
12. $x^2 + 17x + 72$
13. $x^2 + 5x + 6$
14. $x^2 - 3x + 2$
15. $x^2 - 5x - 6$
16. $x^2 - 12x + 27$
17. $x^2 + 2x + 1$
18. $x^2 + 2x - 35$
19. $x^2 + 14x + 45$
20. $x^2 + x - 30$

Answers:

1. $(x+1)(x+1)$
2. $(x+7)(x+4)$
3. $(x+4)(x+9)$
4. $(x-9)(x-9)$
5. $(x+9)(x+9)$
6. $(x+1)(x+3)$
7. $(x+2)(x+1)$
8. $(x+5)(x+1)$
9. $(x+4)(x-7)$
10. $(x+2)(x+6)$
11. $(x+2)(x+9)$
12. $(x+8)(x+9)$
13. $(x+2)(x+3)$
14. $(x-2)(x-1)$
15. $(x+1)(x-6)$
16. $(x-3)(x-9)$
17. $(x+1)(x+1)$
18. $(x-5)(x+7)$
19. $(x+9)(x+5)$
20. $(x-5)(x+6)$