5. Vorübung zur 2. Binomischen Formel

Ausführlicher Weg ohne Formel

2. Binomische Formel: a² - 2ab + b²

1.) (x - 5)² = (x - 5)(x - 5) = x² - 5x - 5x + 25 = x² - 10x + 25

2.) (x - 1)² = (x - 1)(x - 1) = x² + x - x + 1 = x² - 2x + 1

3.) (x - 6)² = (x - 6)(x - 6) = x² + 6x + 6x - 36 = x² - 12x + 36

4.) (6x - 9)² = (6x - 9)(6x - 9) = 36x² - 54x - 54x + 81 = 36x² - 108x + 81

5.) (3x - 12)² = (3x - 12)(3x - 12) = 9x² - 36x - 36x + 144 = 9x² - 72x + 144

6.) (6x - 5)² = (6x - 5)(6x - 5) = 36x² - 30x - 30x + 25 = 36x² - 60x + 25

7.) (5x - 2)² = (5x - 2)(5x - 2) = 25x² - 10x - 10x + 4 = 25x² - 20x + 4

8.) (3x - 7)² = (3x - 7)(3x - 7) = 9x² - 21x - 21x + 49 = 9x² - 42x + 49

9.) (10x - 7)² = (10x - 7)(10x - 7) = 100x² - 70x - 70x + 49 = 100x² - 140x + 49

10.) (5x - 4)² = (5x - 4)(5x - 4) = 25x² - 20x - 20x + 16 = 25x² - 40x + 16

11.) (7x - 7)² = (7x - 7)(7x - 7) = 49x² - 49x - 49x + 49 = 49x² - 98x + 49

12.) (5x - 5)² = (5x - 5)(5x - 5) = 25x² - 25x - 25x + 25 = 25x² - 50x + 25

13.) (8x - 8)² = (8x - 8)(8x - 8) = 64x² - 64x - 64x + 64 = 64x² - 128x + 64

14.) (4x - 7)² = (4x - 7)(4x - 7) = 16x² - 28x - 28x + 49 = 16x² - 56x + 49

15.) (8x - 6)² = (8x - 6)(8x - 6) = 64x² - 48x - 48x + 36 = 64x² - 96x + 36

16.) (4x - 8)² = (4x - 8)(4x - 8) = 16x² - 32x - 32x + 64 = 16x² - 64x + 64

17.) (2x - 5)² = (2x - 5)(2x - 5) = 4x² - 10x - 10x + 25 = 4x² - 20x + 25