10. Gleichungen mit gemischten binomischen Formeln

1.) (6x + 2)² - (6x + 2)(6x - 2) = (2x + 1)(2x - 1) - (2x - 9)(2x + 9) x = 3

2.) (3x + 5)(3x - 5) + (5x - 3)² = (7x - 1)² - 5x(3x + 4) - 1 x = 4

3.) (3x - 2)(3x + 2) + (4x + 3)² = (5x + 1)² + 18 x = 1

4.) (8x + 3)(8x - 3) + (6x + 2)² = (10x + 1)(10x - 1) + 4(2x + 7) x = 2

5.) (5x - 6)(5x + 6) - (4x - 3)(4x + 3) = (3x - 2)(3x + 2) - (3x + 2) x = 7

6.) (3x + 4)² - (2x + 1)(2x - 1) = (9x² + 25) - (2x - 4)(2x + 4) x = 1

7.) (8x + 1)² - (7x - 1)² = (3x + 2)(5x + 4) x = 1

8.) (8x - 5)(8x + 5) - (6x + 5)(6x - 5) = (5x - 2)² +3x² +16 x = 1

9.) (2x + 5)² - (2x + 2)(2x - 2) = 8(2x² + 1) - (4x + 9)(4x - 9) x = 3

10.) (8x + 3)² - (7x + 5)(7x - 5) = (5x + 2)(3x + 4) +48 x = 1

11.) (5x - 6)(5x + 6) + (2x + 2)² = (6x - 1)(6x + 1) -7(x² - 7) x = 10

12.) (6x + 5)(6x - 5) + (3x + 2)² = (7x - 1 )(7x + 1) -4(x² - 1) x = 2

13.) (5x - 4)² + (4x - 3)² = (8x - 7)² - 23(x² - 1) + 1 x = 1

14.) (8x + 2)² - (8x + 5)(8x - 5) = (2 + 3)² - (2x + 10)(2x - 10) x = 4

15.) (4x + 3)² - (4x + 4)(4x - 4) = 9(x² + 8) - (3x - 5)(3x + 5) x = 3

16.) (4 - 3x)² + (4x - 1)² = (6 - 5x)² +9 x = 1

17.) (6x + 5)(6x - 5) + (2x + 1)² = (7x - 1)(7x + 1) - 9(x² - 1) x = 8

18.) (5x - 6)² + (3x + 4)(3x - 4) = (6x - 7)² + (x + 17) -2x² x = 2

19.) (10x + 1)² - (10x + 3)(10x - 3) = (4x + 1)² - (4x - 9)(4x + 9) x = 6

20.) (5x - 4)² - (4x - 7)² = (3x - 2)² + 19 x = 2

21.) (10x - 2)(10x + 2) + (x + 5)² = (9x + 2)(9x - 2) + 5(4x² + 9) x = 2

22.) (3x - 5)² + (7 + 2x)² = (2x - 3)² + 9x² + 65 x = 0

23.) (10x - 11)² = (6x - 5)² + (8x - 11)² + 7 x = 2

24.) (8x - 4)² - (6x - 3)² = (5x - 4)² + 3(x² + 1) x = 1

25.) (5x - 1)² - (4x - 1)² = (3x - 1)² + 7 x = 2

26.) (8x - 2)² - (7x - 3)² = (4x - 1)² - (x² - 12) x = 1

27.) (10x + 9)² - (8x + 7)² = (6x + 5)² + 55 x = 6

28.) (9x + 4)² - (8x + 5)² = (4x + 3)² + (x + 1)² - 53 x = 1

29.) (8x - 3)² + (6x - 5)² = (10x - 6)² + 70 x = 6

30.) (3x + 2)(3x - 2) + (4x + 2)² = (5x + 3)(5x - 3) + 25 x = 1

31.) (11x - 12)² + (10x - 4)² + (2x - 1)² = (15x - 11)² +4 x = 2

32.) (4x - 3)² + (3x - 4)² = (5x - 6)² + 49 x = 5

33.) (8x - 3)² + (15x - 4)² = (17x - 5)² + 14 x = 7

34.) (13x - 2)² + (2x - 5)² = (12x - 5)² +29x² +100 x = 2

35.) (7x - 3)² - (4x - 3)² = (6x - 3)² -3(x² - 3) x = 1

36.) (6x + 3)² - (6x + 3)(6x - 3) = 9x² + 5 - (3x + 11)(3x - 11) x = 3

37.) (13x - 4)² - (5x - 3)² = (12x - 6)² + 41 x = 1

38.) (12x - 4)² + (5x - 6)² = (13x - 7)² + 55 x = 2