

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**MPM2D - Worksheet - Factoring Complex Trinomials (with Common Factors)**

1.  $3x^2 + 25x + 8$
2.  $5x^2 + 46x + 9$
3.  $2x^2 + 15x + 22$
4.  $3x^2 + 14x + 15$
5.  $8x^2 + 22x + 5$
6.  $2x^2 + 7x + 3$
7.  $5x^2 + 61x + 12$
8.  $8x^2 + 46x + 11$
9.  $6x^2 + 11x + 3$
10.  $8x^2 + 38x + 9$
11.  $-4x^2 + 2x + 72$
12.  $12x^2 - 117x - 30$
13.  $20x^2 - 42x + 16$
14.  $12x^2 + 69x - 105$
15.  $50x^2 + 140x + 80$
16.  $-20x^2 - 230x + 120$
17.  $15x^2 - 70x - 25$
18.  $6x^2 - 22x - 84$
19.  $18x^2 + 87x - 66$
20.  $100x^2 - 170x - 110$
21.  $-6x^2 - 44x + 160$
22.  $-3x^2 - 4x + 20$
23.  $4x^2 + 17x + 18$
24.  $24x^2 + 20x - 100$
25.  $20x^2 + 29x + 5$
26.  $75x^2 - 170x - 385$
27.  $30x^2 - 129x - 198$
28.  $2x^2 + 13x + 20$
29.  $5x^2 + 14x + 8$
30.  $20x^2 - 150x + 280$
31.  $10x^2 + 106x - 44$
32.  $20x^2 + 13x + 2$
33.  $4x^2 + 15x + 14$
34.  $2x^2 + 11x + 9$
35.  $25x^2 - 70x + 40$
36.  $5x^2 + 11x + 6$
37.  $5x^2 + 13x + 8$
38.  $20x^2 + 88x - 192$
39.  $-8x^2 - 66x - 70$

## MPM2D - Worksheet - Factoring Complex Trinomials (with Common Factors)

### Answer Section

1. Complex Trinomial:  $(3x + 1)(x + 8)$
2. Complex Trinomial:  $(5x + 1)(x + 9)$
3. Complex Trinomial:  $(x + 2)(2x + 11)$
4. Complex Trinomial:  $(x + 3)(3x + 5)$
5. Complex Trinomial:  $(4x + 1)(2x + 5)$
6. Complex Trinomial:  $(x + 3)(2x + 1)$
7. Complex Trinomial:  $(5x + 1)(x + 12)$
8. Complex Trinomial:  $(2x + 11)(4x + 1)$
9. Complex Trinomial:  $(2x + 3)(3x + 1)$
10. Complex Trinomial:  $(4x + 1)(2x + 9)$
11. Common Factor, Complex Trinomial:  $-2(x + 4)(2x - 9)$
12. Common Factor, Complex Trinomial:  $3(x - 10)(4x + 1)$
13. Common Factor, Complex Trinomial:  $2(5x - 8)(2x - 1)$
14. Common Factor, Complex Trinomial:  $3(4x - 5)(x + 7)$
15. Common Factor, Complex Trinomial:  $10(x + 2)(5x + 4)$
16. Common Factor, Complex Trinomial:  $-10(x + 12)(2x - 1)$
17. Common Factor, Complex Trinomial:  $5(x - 5)(3x + 1)$
18. Common Factor, Complex Trinomial:  $2(3x + 7)(x - 6)$
19. Common Factor, Complex Trinomial:  $3(3x - 2)(2x + 11)$
20. Common Factor, Complex Trinomial:  $10(2x + 1)(5x - 11)$
21. Common Factor, Complex Trinomial:  $-2(x + 10)(3x - 8)$
22. Common Factor, Complex Trinomial:  $-(x - 2)(3x + 10)$
23. Complex Trinomial:  $(x + 2)(4x + 9)$
24. Common Factor, Complex Trinomial:  $4(3x - 5)(2x + 5)$
25. Complex Trinomial:  $(4x + 5)(5x + 1)$
26. Common Factor, Complex Trinomial:  $5(3x - 11)(5x + 7)$
27. Common Factor, Complex Trinomial:  $3(5x + 6)(2x - 11)$
28. Complex Trinomial:  $(2x + 5)(x + 4)$
29. Complex Trinomial:  $(5x + 4)(x + 2)$
30. Common Factor, Complex Trinomial:  $10(2x - 7)(x - 4)$
31. Common Factor, Complex Trinomial:  $2(5x - 2)(x + 11)$
32. Complex Trinomial:  $(5x + 2)(4x + 1)$
33. Complex Trinomial:  $(x + 2)(4x + 7)$
34. Complex Trinomial:  $(2x + 9)(x + 1)$
35. Common Factor, Complex Trinomial:  $5(5x - 4)(x - 2)$
36. Complex Trinomial:  $(5x + 6)(x + 1)$
37. Complex Trinomial:  $(x + 1)(5x + 8)$
38. Common Factor, Complex Trinomial:  $4(5x - 8)(x + 6)$
39. Common Factor, Complex Trinomial:  $-2(4x + 5)(x + 7)$