

Algebra 2**5.3-5.4 Worksheet - Factoring Quadratic Trinomials**

Name _____

Factor each of the following BASIC TRINOMIALS.

1. $x^2 + 3x + 2$	11. $x^2 + 2x - 3$
2. $x^2 - 5x + 6$	12. $x^2 - 2x - 63$
3. $x^2 + 13x + 40$	13. $x^2 + 5x - 50$
4. $x^2 - 13x + 36$	14. $x^2 + 4x - 60$
5. $x^2 - 17x + 42$	15. $x^2 + x - 72$
6. $x^2 + 12x + 35$	16. $x^2 - x - 72$
7. $x^2 - 15x + 54$	17. $x^2 - 5x - 24$
8. $x^2 - 16x + 63$	18. $x^2 - 4x - 21$
9. $x^2 + 15x + 50$	19. $x^2 - x - 30$
10. $x^2 + 11x + 30$	20. $x^2 + x - 56$

Factor each of the following COMPLEX TRINOMIALS.

21. $2x^2 + 5x + 3$

23. $5x^2 + 6x + 1$

25. $7x^2 - 8x + 1$

27. $5x^2 - 16x + 3$

22. $2x^2 + 7x + 3$

24. $5x^2 - 22x + 8$

26. $3x^2 + 2x - 16$

28. $7x^2 - 18x + 8$

29. $2x^2 + 5x + 2$

30. $3x^2 + x - 2$

31. $2x^2 - x - 6$

32. $3x^2 + 2x - 5$

Review-complete the GCF factoring.

33. $11x^4 + 44x^2y$

$11x^2(\underline{\hspace{1cm}} + \underline{\hspace{1cm}})$

34. $xy^2 + 2x^2y$

$xy(\underline{\hspace{1cm}} + \underline{\hspace{1cm}})$

35. $12x^3y - 3xy^2 + 9xy$

$xy(\underline{\hspace{1cm}} - \underline{\hspace{1cm}} + \underline{\hspace{1cm}})$

36. $6ax + 10bx + 32cx$

$2x(\underline{\hspace{1cm}} - \underline{\hspace{1cm}} + \underline{\hspace{1cm}})$