

Math 2 – Honors
Unit 2 – Quadratic Function
Lesson 6 – More Practice with Factoring
Part I – GCF

Name _____
Date: _____ Pd: _____

1. $2z^2 + 16 =$	6. $6c^4 - 9c =$
2. $8g^2 + 20g =$	7. $-9a^6 - 27a^5 - 12a^3 =$
3. $8r^3 - 36r - 4 =$	8. $18c^2 + 4c =$
4. $28s^2 + 20s =$	9. $-8y^6 + 4y^4 + 8 =$
5. $16x^3 + 4x^2 + 36x =$	10. $35v^6 - 15v^3 - 15v^2 =$

Part II – Difference of Two Squares

11. $x^2 - 16 =$	16. $x^4 - 1 =$
12. $36u^6 - 81w^2 =$	17. $100k^4 - 49 =$
13. $h^2 + 36 =$	18. $p^8 - 25 =$
14. $64 - 25j^{10} =$	19. $4 - 36v^{12} =$
15. $9s^2 - 16t^2 =$	20. $144 + y^4 =$

Part III – Trinomial Squares

21. $x^2 + 8x + 16 =$	26. $x^2 - 4xy + 4y^2 =$
22. $x^2 - 14x + 49 =$	27. $2x^2 - 40x + 200 =$
23. $9x^2 + 18xy + 9y^2 =$	28. $12x^2 + 36xy + 27y^2 =$
24. $16x^2 - 56xy + 49y^2 =$	29. $a^4 + 14a^2 + 49 =$
25. $x^2 - 6x + 9 =$	30. $4x^4 + 4x^2 + 1 =$

Part IV – Trinomials in the form $x^2 + bx + c$

31. $x^2 - 6x - 7 =$	36. $x^2 + 5x + 6 =$
32. $s^2 + 12s + 35 =$	37. $w^2 - 6w - 5 =$
33. $p^2 - 9p + 20 =$	38. $k^2 + 3k - 4 =$
34. $b^2 + 5b - 36 =$	39. $h^2 - 9h - 36 =$
35. $p^2 - 8p - 9 =$	40. $w^2 + 2w - 15 =$

Part V - Trinomials in the form $ax^2 + bx + c$

41. $2x^2 + 9x - 5 =$	46. $2a^3 - 38a^2 + 176a =$
42. $16m^2 - 48m + 11 =$	47. $2q^5 - 12q^4 - 80q^3 =$
43. $3x^2 - 5x - 2 =$	48. $3d^2 + 18d + 15 =$
44. $20c^2 - 63c + 49 =$	49. $2x^2 - x - 15 =$
45. $4u^2 + 37u + 63 =$	50. $3a^2 - 4a + 1 =$

Part VI - Grouping

51. $4x^5 + 6x^3 + 6x^2 + 9 =$	56. $7y^2 - 14y + by - 2b =$
52. $c^6 - c^4 - c^2 + 1 =$	57. $12xy + 3yz - 4x - z =$
53. $4y^5 + 6y^4 + 6y^3 + 9y^2 =$	58. $20a + 12 - 25ax - 15x =$
54. $x^{13} + x^7 + 2x^6 + 2 =$	59. $4mna + 4mnb + 5na + 5nb =$
55. $20g^3 - 4g^2 - 25g + 5 =$	60. $t^2 - 9t + 3t - 27 =$

Part VII - Mixed Factoring

61. $d^2 + d - 132 =$	66. $3n^2 - 43n + 84 =$
62. $p^2 - 100 =$	67. $f^2 + 121 =$
63. $3v^4 + 9v^3 - 12v^2 =$	68. $4x^4 + 4x^2 + 1 =$
64. $3h^2 + 44h + 121 =$	69. $18c^3 - 21c^2 - 30c + 35 =$
65. $9x^{10} + 12x^5 + 4 =$	70. $z^2 - 6z - 72 =$