

Algebra II Worksheet #2 Unit 6 page 1 _____

Perform the indicated operations.

1. $(5x + 2)(x + 4) =$ _____

2. $(4x + 1)(3x + 4) =$ _____

3. $(6x - 5)(2x - 1) =$ _____

4. $(5x - 2)(x - 7) =$ _____

5. $(3x + 8)(2x - 3) =$ _____

6. $(5x + 6)(x - 4) =$ _____

7. $(6x - 7)(2x + 5) =$ _____

8. $(3x - 5)(7x + 5) =$ _____

Factor each of the following.

9. $2x^2 + 5x + 3 =$ _____

10. $15x^2 + 26x + 8 =$ _____

11. $8x^2 - 18x + 9 =$ _____

12. $6x^2 - 25x + 25 =$ _____

13. $6x^2 - 11x - 10 =$ _____

14. $12x^2 - 13x - 14 =$ _____

15. $8x^2 + 14x - 15 =$ _____

16. $9x^2 + 13x - 10 =$ _____

Use the factoring method to solve each of the following equations. Show your process neatly organized.

17. $6x^2 + 11x + 3 = 0$

18. $12x^2 + 29x + 15 = 0$

19. $14x^2 - 41x + 15 = 0$

20. $9x^2 - 15x + 4 = 0$

21. $35x^2 - 6x - 9 = 0$

22. $20x^2 - 3x - 35 = 0$

Algebra II Worksheet #2 Unit 6 page 2

Use the factoring method to solve each of the following equations. Show your process neatly organized.

23. $6x^2 + 19x - 20 = 0$

24. $15x^2 + 11x - 14 = 0$

25. $12x^2 + x - 6 = 0$

26. $2x^2 - 8x = 3x - 5$

27. $x^2 = x + 12$

28. $x^2 + (x + 2)^2 = (x + 4)^2$

29. $x^2 + 6(x - 2) = 5x - 12$

30. $(5x - 2)(5x + 3) = 5x + 3$

31. $6x^2 - 5 = 7x - 2$