

Algebra II Class Worksheet #2 Unit 6 page 1 _____

Perform the indicated operations.

1. $(3x + 2)(x + 5) =$ _____

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

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

4. $(3x - 4)(2x - 5) =$ _____

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

6. $(4x + 3)(x - 5) =$ _____

7. $(4x - 3)(5x + 3) =$ _____

8. $(6x - 1)(8x + 3) =$ _____

Factor each of the following.

9. $3x^2 + 10x + 8 =$ _____

10. $18x^2 + 21x + 5 =$ _____

11. $3x^2 - 23x + 30 =$ _____

12. $5x^2 - 22x + 8 =$ _____

13. $6x^2 - 13x - 28 =$ _____

14. $35x^2 - 16x - 3 =$ _____

15. $30x^2 + 13x - 3 =$ _____

16. $21x^2 + 5x - 6 =$ _____

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

17. $5x^2 + 22x + 8 = 0$

18. $18x^2 + 9x + 1 = 0$

19. $3x^2 - 26x + 16 = 0$

20. $12x^2 - 28x + 15 = 0$

21. $6x^2 - 11x - 10 = 0$

22. $6x^2 - 19x - 7 = 0$

Algebra II Class Worksheet #2 Unit 6 page 2

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

23. $5x^2 + 13x - 6 = 0$

24. $15x^2 + 26x - 21 = 0$

25. $40x^2 + x - 6 = 0$

26. $3x^2 + 5x = 4x + 2$

27. $x^2 = 5x + 6$

28. $x^2 + (x + 1)^2 = (x + 2)^2$

29. $x^2 + 5(x - 3) = 7x - 15$

30. $(3x - 1)(3x + 4) = 9x$

31. $3x^2 - 5 = 5x - 7$