Name: _____ **Date:** _____ **Period:** _____

Factoring Using Distributive Property –
9.4 Practice 1
Solve each equation. Check you solution.

1. $x(x + 3) = 0$

2. $3m(m - 4) = 0$

3. $(r - 3)(r + 2) = 0$

4. $3x(2x - 1) = 0$

5. $(4m + 8)(m - 3) = 0$

6. $5s^2 = 25s$

7. $(4c + 2)(2c - 7) = 0$

8. $5p - 15p^2 = 0$

9. $4y^2 = 28y$

10. $12x^2 = -2x$

11. $(4a + 3)(8a + 7) = 0$

12. $8y = 12y^2$

13. $x^2 = -2x$

14. $(6y - 4)(y + 3) = 0$

15. $4m^2 = 4m$

16. $12x = 3x^2$

17. $12a^2 = -3a$

18. $(12a + 4)(3a - 1) = 0$

Factor each polynomial.

19. $24x + 48y$

20. $30mn^2 + m^2n - 6n$

21. $q^4 - 18q^3 + 22q$

22. $9x^2 - 3x$

23. $4m + 6n - 8mn$

24. $45s^3 - 15s^2$

25. $14c^3 - 42c^5 - 49c^4$

26. $55p^2 - 11p^4 + 44p^5$

27. $14y^3 - 28y^2 + y$

28. $4x + 12x^2 + 16x^3$

29. $4a^2b + 28ab^2 + 7ab$

30. $6y + 12x - 8z$

31. $x^2 + 2x + x + 2$

32. $6y^2 - 4y + 3y - 2$

33. $4m^2 + 4mn + 3mn + 3n^2$

34. $12ax + 3xz + 4ay + yz$

35. $12a^2 + 3a - 8a - 2$

36. $xa + ya + x + y$