

Name: _____

Unit 7: Polynomials & Factoring

Date: _____ Bell: _____

Homework 2: Monomial x Polynomial**Directions:** Simplify the following polynomials. **Answers must be in standard form.**

1. $a(4a + 3)$

2. $-c(11c + 4)$

3. $x(2x - 5)$

4. $2y^2(y^5 - 4y)$

5. $-3mn(m^2n^3 + 2mn)$

6. $9p^3q^4(3p^3 - 5q)$

7. $3r^4(5r^2 - r + 4)$

8. $7c(c^3 - 2c^2 + 5)$

9. $-3n^2(-2n^3 + 7n + 4n)$

10. $w^3(3w^2 + 2w) + 5w^4$

11. $z(5z - 3) - 2z$

12. $y^2(-4y + 5) - 6y^2$

13. $2x(3x^2 + 4) - 3x^2$

12. $4a(5a^2 - 4) + 9a$

15. $-2(4v^2 + 5v) + v(v^2 + 6v)$

16. $4b(5b - 3) - 2(b^2 - 7b - 4)$

17. $4n(3n^2 + n - 4) - n(3 - n)$

18. $3m(3m + 6) - 3(m^2 + 4m + 1)$

19. $2(4k^2 - 2k) - 3(-6k^2 + 4) + 2k(k - 1)$

20. Write an expression in simplest form to represent the area of the shaded region.