

Algebra Quiz

9.1 to 9.3

Name: _____

Period: _____ Date: _____

Match each polynomial with the correct name.

- | | |
|--|--------------------------------------|
| 1. <input type="text"/> 2x + 1 | a. Cubic Trinomial |
| 2. <input type="text"/> $3x^2 - 4x + 9$ | b. 4 th degree polynomial |
| 3. <input type="text"/> $3x^3$ | c. cubic monomial |
| 4. <input type="text"/> $13x^3 - 8x^2 + 2x$ | d. linear binomial |
| 5. <input type="text"/> $x^2 + 5$ | e. quadratic binomial |
| 6. <input type="text"/> $13x^4 - 8x^3 + 2x^2 + 6x$ | f. quadratic trinomial |

Simplify. Write answer in standard form.

7. $(3x^2 - 4x + 9) + (5x^2 + 2x + 3)$ 8. $(2x + 4x^2 + 5) + (3x^2 + 3 + x)$

9. $(6x^2 - 9x + 2) - (3x^2 + 4x + 4)$ 10. $(8x + 2x^2 + 3) - (4x^2 - 2 - 4x)$

Simplify by using the distributive property. Write answer in standard form.

11. $4x(2x - 5)$ 12. $-3b^2(b^2 - 2b + 1)$

Factor each polynomial. (hint: GCF)

13. $8x^2 + 4x$

14. $16x^3 + 12x^2 + 4x$

15. $8x^3 - 12x^2 - 4x$

Multiply. Write answer in standard form.

16. $(m + 3)(m + 5)$

17. $(3x + 3)(2x + 4)$

18. $(y + 4)(y - 2)$

19. $(5a + 3)(2a - 4)$

20. $(5x - 4)(2x^2 - 3x + 2)$