

Name

KEY

Algebra 2 - Unit 5 Test Review

1. Write a polynomial in standard form.

$$x^2 + 3x + 2 \text{ (Answer will vary)}$$

2. Simplify. $2x^2 + 10x^2$

$$12x^2$$

3. Simplify $5x^2 \cdot 2x^8$?

$$10x^{10}$$

4. Any number raised to the power of 0 is 1.

Use the following polynomial for questions 5 - 8: $6x^2 - 2x^5 + 5$

5. What is the degree of the polynomial?

5th Degree

6. What type of polynomial is this?

Trinomial

7. What is the constant term?

5

8. Simplify x^0

1

9. Simplify $(x^2)^{10}$

$$x^{20}$$

10. Simplify. $(6a^0b^5)(4a^5b^4)$.

$$24a^5b^9$$

11. Simplify. $\frac{8a^3b^3}{2ab^2}$

$$4a^2b$$

12. Simplify $(8x^2 - 6) + (5x^2 + 20)$

$$13x^2 + 14$$

13. Simplify. $(10a^3 - 6a^2 + a) - (6a^3 - 2a^2 - 8)$.

$$4a^3 - 4a^2 + a + 8$$

14. Simplify: $(x^3 - 2x + 1) \div (x - 1)$

$$x^2 + x - 1$$

15. Simplify. $(x^2 - 2x - 35) \div (x - 7)$

$$x + 5$$