

NAME _____

DATE _____

Module Test **A**

Module 2

1. Identify the coefficient of each monomial.

- a. $7k$ _____ b. $\frac{m}{5}$ _____
 c. $-x$ _____ d. $-7.64B$ _____

2. Give an example of a term satisfying the given condition.

- a. has a coefficient of -3 and two variables _____
 b. has a squared variable, with a coefficient of $-\frac{2}{3}$ _____
 c. has a decimal coefficient, with a single variable _____
 d. is a constant _____

3. Identify each polynomial as a *monomial*, *binomial*, or *trinomial*.

- a. $53xy^2z$ _____ b. $5c + 11$ _____
 c. $r^2 - 5r + 9$ _____ d. $mn + m - n$ _____

4. Find the degree of each polynomial.

- a. $7p$ _____ b. -15 _____
 c. $5a^5b + 3a^4b^2 - 2ab + 1$ _____ d. $\frac{2g^2h}{9} + \frac{7gh^3}{3}$ _____

5. Give an example of each of the following.

- a. monomial _____ b. binomial _____
 c. trinomial _____ d. monomial with three variables _____

Write an algebraic expression for each word phrase.

6. three more than the cube of y _____
 7. the sum of a number and six _____
 8. nine less than a number x _____
 9. 17 less than the product -11 times a number V _____
 10. one-half of the sum of a number and twelve _____

Name the property each statement illustrates.

11. $7(3 + 5) = (3 + 5)7$ _____

12. $5(g - 2) = 5g - 10$ _____

13. $7T + (-7T) = 0$ _____

14. $a + (b + c) = (a + b) + c$ _____

Write the opposite and the reciprocal of each expression, if possible.

15. a. $-\frac{6y}{5}$ _____

b. 0 _____

Simplify each expression, if possible.

16. $9u + u$ _____

17. $3 - x + 7x - 9 - 2x + 3x^2$ _____

18. $h(3h + 5) - 7h + 2.5(4h - 10)$ _____

19. $m^3 + 7m^4 - 16m + 3m^2 + 7m - 3m^2 - 7$ _____

20. $7 - 4(3d - 6)$ _____

21. Evaluate $t^3v^2 + 2t^2v^3 - t + 6v$ for $t = -1$ and $v = 3$ _____

Evaluate the expression $\sqrt{b^2 - 4ac}$ for the given values of the variables.

22. $a = 1, b = 3, c = 2$ _____

23. $a = 1, b = -5, c = -6$ _____

Evaluate each expression when $x = 3$, $y = 0$, and $z = -\frac{1}{2}$.

24. $\frac{8z + x^2y^2 - 2x}{14z + 2x - 7y}$ _____

25. $x^2 + y^2 - 2z + 3xy^3 - |xz|$ _____