Algebra Chapter 1 Practice Test 2

Name: _____

Write an algebraic expression or equation for what is given.

_____ 1.   the product of a number and ten

_____ 2.   six taken away from a number

_____ 3.   a number increased by four

_____ 4.   The product of three and a number equals the sum of the number and five.

_____ 5.   a number less four

_____ 6.   The sum of a number and ten is equal to the product of that number and five.

_____ 7.   A number taken away from two equals the sum of that number and four.

Evaluate the expressions. Circle your final answer and show your work!

8. $20 - 2 \cdot (3 - 1)^2$

9. $(3 + 2)^2 \cdot (2^2 - 2)^2$

10. $20 \div 10 \div 2 + 1^2$

On 11-13, let $a = 10$, $b = 5$, $c = 2$, and $y = 1$. Evaluate each.

11. $ab + bc$

12. $(ab - 5a)^2$

13. ca^2

Simplify each expression. Use the distributive property where appropriate.

_____ 14. $n - 4 + 6n - 6$

_____ 15. $2n + 3n + 2 + 7 + n$

_____ 16. $3a + b + 5 + 8a + b - 2$

_____ 17. $-n - n - n - n - n + 6 - 10$

_____ 18. $5(2n + 3) + 2n + 6$

_____ 19. $2(2n + 2) + 5(5n + 2)$

_____ 20. $2(3n - 3) + 2n - 8 + 2(5n + 1)$

_____ 21. $3(2n + 3a + 4) + 3(3n + 2a + 5)$

_____ 22. $4ch^3 + 2ch + 5ch^3 - 4ch$

_____ 23. $3(2n - 4y) - 2(2n - 3y)$

_____ 24. $5(x - 2) - 2(2x - 3)$

_____ 25. $3xy^2 + 2x^2y + 5xy^2 + 3xy^2 + 4x^2y$

Classify the following as an expression or equation.

_____ 26. $x - 7 = 3x + 4$

_____ 27. $5x^3 - 2x^2 - 4 = 0$

_____ 28. $8x - 7 = 12$

_____ 29. $6x - 8y + 9$

_____ 30. $n + 1$