

Algebra Chapter 1 Practice Test 1

Name: _____

Write an algebraic expression or equation for what is given.

- _____ 1. the sum of a number and ten
- _____ 2. six less a number
- _____ 3. a number increased by one
- _____ 4. the product of three and a number
- _____ 5. twenty taken away from a number
- _____ 6. The sum of a number and four is equal to the product of that number and two.
- _____ 7. A number taken away from fifteen equals the sum of that number and two.

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

8. $25 - 4 \cdot 5 - 3 \cdot 2$ 9. $10(3 - 2)^2 - 4 \cdot 2$ 10. $2(12 - 10 \div 2) \div 2 + 1$

On 11-13, let $a = 10$, $b = 5$, $c = 2$, and $y = 1$. Evaluate each. Only use a calculator to perform an operation on two numbers, not more.

11. $a^2 - bc$ 12. $(ab - 40)^2$ 13. $2bcy^2 - ac$

Simplify each expression. Use the distributive property where appropriate.

- _____ 14. $10n - 4 + 2n - 6$
- _____ 15. $n + n + 2 + 7 + n$
- _____ 16. $3a + 2b + 5 + 4a + b - 2$
- _____ 17. $4(2n - 3) + 2(2n - 1)$
- _____ 18. $4(2n + 3) + 5n + 2$
- _____ 19. $3(2n + 1) + 5(2n + 2)$
- _____ 20. $2(5n - 3) + 2n - 4 + 2(3n + 1)$
- _____ 21. $4(2n + 3a + 4) + 2(3n + 2a + 5)$
- _____ 22. $4ab^2 + 2ab + 6ab^3 + 5ab + 3ab^3 + 11ab^2$
- _____ 23. $5(2x - 1) - 3(2x - 1)$ [Notice you must distribute a -3 through.]
- _____ 24. $3x^3 - 2x^2 - x - 5x^2 - 7x^3$

Classify the following as an expression or equation.

- _____ 25. $34 - x$
- _____ 26. $5x - 4 = 1$
- _____ 27. $5x^3 - 2x - 4$
- _____ 28. $8x = 12$
- _____ 29. $6x - 8y + 9$
- _____ 30. $2 = 1 + 1$