

Chapter 1 Practice Test Form A

Simplify.

1. $4 + 8 \div 2 + 6 \times 2$

2. $(4 + 7) \cdot (9 - 2)$

3. $(3^2 + 4^2) + 5$

4. $18 + 3^2 \div (6 - 3)$

Evaluate each expression.

5. $5x + 4$ for $x = 5$

6. $y^2 \div z$ for $y = 12$ and $z = 9$

7. $|6 + 2m|$ for $m = 7$

8. $2(2s - 3t)$ for $s = 5.2$ and $t = 1.9$

9. $\frac{a}{b}$ for $a = \frac{2}{3}$ and $b = \frac{5}{6}$

10. $\frac{2d - 3}{5}$ for $d = 9$

Is each statement *true* or *false*? If the statement is false, give a counterexample.

13. All real numbers are rational numbers.

14. The absolute value of a negative number is always positive.

Write an algebraic expression for each phrase.

15. 4 minus the sum of a number and 6

16. 1 more than the quotient of n and 2

17. **Writing** Determine which is greater and explain why.

$\frac{2}{9}$, 0.23

Simplify.

18. $12 - (-3)$

19. $-6(-3) + (-2)$

20. $(-6)^2 \div (-9)$

21. $-3 + 10 \div 2 + (-6) \times 3$

Chapter Test

Algebra 1 Chapter 1

Chapter 1 Practice Test (continued)**Form A***Chapter 1***Evaluate each expression.**

22. $7xy + 4$ for $x = -5$ and $y = -2$

23. $m^2 \div n$ for $m = -14$ and $n = -4$

24. $|4 - 2y|$ for $y = 9$

25. $-6(4p - 2q)$ for $p = -1.4$ and $q = 1.3$

26. $\frac{b}{c}$ for $b = -\frac{1}{3}$ and $c = -\frac{2}{3}$

27. $\frac{3d + 1}{25}$ for $d = -20$

Simplify each expression.

28. $-\frac{1}{2}(4 - 6a)$

29. $-2(-3 + 2a)$

Write an expression for each phrase.

30. 7 times the quantity f plus 12

31. 3 times the difference -4 times q minus 10

Simplify each expression. Justify each step.

32. $\frac{1}{4}(4x - 8) + 3x$

33. $(4^2 - 2^3)(1^3 - 3^2)$

Simplify each expression.

34. $-4\frac{3}{5} - 2\frac{1}{2}$

35. $6.2 - 9.7 + (-3.1)$

36. On a diving exercise, a submarine rose 20 ft, dove 40 ft, rose 7 ft, and rose 13 ft. What was the change in depth after the exercise?

37. At 9:00 A.M., the temperature was -7°F . By noon, the temperature was 19°F . What was the change in temperature?