Name: _____ Period: _____ Date: _____

Chapter 1 and 2 Review Worksheet

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. In an online media store, downloaded songs cost \$3 each and books cost \$9 each. Taji paid \$7 in sales tax when he purchased 15 songs and 3 books. Write and simplify an expression to show how much Taji spent on everything, including sales tax.
   a. $3+15+9+3+7$; \$37
   b. $3\times15+9\times3+7$; \$223
   c. $3\times3+9\times15+7$; \$151
   d. $3\times15+9\times3+7$; \$79

Numeric Response

2. Evaluate the expression $\frac{x+y}{2x-y}$ for $x = 18$ and $y = 33$.

Short Answer

3. Identify a possible pattern. Use the pattern to write the next three numbers.
   172, 159, 146, ...

4. Find the value of 7^3.

5. Write the fraction $\frac{21}{24}$ in simplest form.

6. Write $\frac{46}{7}$ as a mixed number.

7. Write $5\frac{5}{6}$ as an improper fraction.

8. Find the least common multiple (LCM) of 7, 10, and 20.

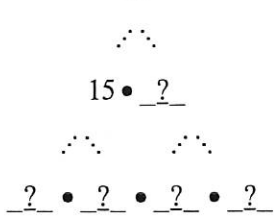
9. Write the decimal 0.51 as a fraction in simplest form.

10. Find the greatest common factor (GCF) of 60, 90, and 66.

11. Write $\frac{3}{8}$ as a decimal.

12. Tell whether the number 65 is prime or composite.

13. Find the prime factorization of the number 90 using a factor tree. Rewrite using exponents.



14. Solve the equation $\frac{f}{2} = -9$. Check your answer.

15. Evaluate $a + b$ for $a = -46$ and $b = 34$.

16. The income from the Spanish Club's bake sale was \$240. Expenses for the sale totaled \$40. Use integer addition to find the total profit or loss from the bake sale.

17. Evaluate $p - q$ for $p = -13$ and $q = -50$.

18. Find the difference $10 - (-25)$.

19. Find the product $6 \cdot (-9)$.

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20. Find the quotient $-78 \div (-2)$.

21. Find the sum $-37 + (-25)$.

22. Use a number line to find the absolute value.
$|6|$

23. Solve the equation $9s = 36$. Show all steps.

24. Thomas wants to display leaf specimens for a science fair. Thomas has 25 leaves, which is 19 fewer than the total needed. Will the science display have a total of 45 leaves, 44 leaves, 6 leaves, or 54 leaves?

25. Simplify $5x + 10 + 4x - 4 + 8x^2 + 11$ by combining like terms.

26. Solve the equation $p + 7 = 27$. Show all steps.

27. Identify like terms in the list: $7q$; $3a^2$; $6q$; $5t$; z^2; a; $4a^2$; $8r$; 5q ; $7r$.

28. A fence has a total of 650 planks. Violeta paints n planks each day. Write an algebraic expression for how many days it will take Violeta to finish painting the fence.

29. Write the phrase as an algebraic expression.
4 times the sum of a number and 20

30. Determine whether $y = 1$ is a solution to $10 = y - 9$.

31. Write the number 100 using an exponent and base 10.

32. Order the numbers 5^2, 8, 2^6, 6^2, 7^1 from least to greatest.

33. Write 23,700 in scientific notation.

34. A snake travels at ninety-one million four hundred forty thousand millimeters per second. Write this speed in scientific notation.

35. Simplify the expression $[(1 + 4 \times 3) - 5]^2$.

36. Simplify the expression $45 + 16 \times 2 \div 4 - 6$.

37. Use the Distributive Property to find $9(86)$.

38. Evaluate $n + 13$ for $n = 24$.

39. Evaluate $\frac{12}{y} + 9z$ for $y = 6$ and $z = 3$.