1 **Chpater 1 Test, Form 2D**

For Questions 1 and 2, write an algebraic expression for each verbal expression.

1. the sum of one-third of a number and 27

1. _____

2. the product of a number squared and 4

2. _____

3. Write a verbal expression for $5n^3 + 9$.

3. _____

4. Evaluate $3^2[(12 - 4) \div 2]$.

4. _____

5. Evaluate $4w + (v - 5)t$ if $w = 2$, $v = 8$, and $t = 4$.

5. _____

For Questions 6 and 7, name the property used in each equation. Then find the value of n.

6. $11 \cdot n = 1$

6. _____

7. $7 + n = 7 + 3$

7. _____

8. Evaluate $6(6 \cdot 1 \div 36)$. Name the property used in each step.

8. _____

9. Rewrite $(10 + 3)5$ using the Distributive Property. Then simplify.

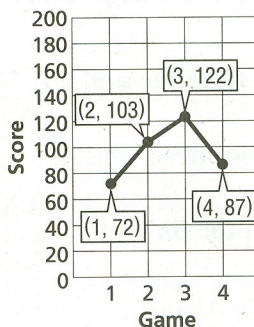9. _____

Simplify each expression.

10. $4w^2 + 7w^2 + 7z^2$

10. _____

11. $3x + 4(5x + 2)$

11. _____

For Questions 12 and 13, evaluate each expression.

12. $5 \cdot 13 \cdot 4 \cdot 1$

12. _____

13. $17 + 6 + 3 + 14$

13. _____

14. Find the solution of $3x - 8 = 16$ if the replacement set is $\{5, 6, 7, 8, 9\}$.

14. _____

15. Solve $\dfrac{6 + 4^2 \cdot 3}{10 - 1} = y$.

15. _____

1 Chapter 1 Test, Form 2D *(continued)*

Use the graph that shows Robert's bowling scores for his last four games.

16. **16.** _____
Identify the independent and
dependent variables.

Graph: Score vs. Game, with points (1, 72), (2, 103), (3, 122), (4, 87)

17. Describe what may have happened
between the first and fourth games.

17. _____

**For Questions 18 and 19, use the
table that shows 2006 airmail
letter rates to New Zealand.**

Weight (oz)	Rate ($)
2.0	1.80
3.0	2.75
4.0	3.70
5.0	4.65

18. Write the data as a set of
ordered pairs.

Source: *World Almanac*

18. _____

19. Draw a graph that shows the
relationship between the weight
of a letter sent airmail and the
total cost.

19.

Graph: Rate ($) vs. Weight (oz), blank grid
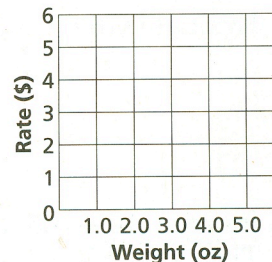
20. Find a counterexample for the following statement.
*If the sum of 2 numbers is even, then the 2 numbers are
even numbers.*

20. _____

Bonus Insert brackets, parentheses, and the symbols for
addition, subtraction, and division in the following
sequence of numbers to create an expression whose
value is 4.
2 5 1 4 1

B: _____