CHAPTER 1

NAME _____ DATE _____

Cumulative Review

For use after Chapter 1

Evaluate the expression when $x = 3$. (1.1)

1. $x + 7$

2. $\frac{36}{x}$

3. $5.2x$

4. $x - 2$

5. $10.8x$

6. $12.9 \div x$

Evaluate the expression when $b = 5$. (1.2)

7. b^2

8. $(15 - b)^3$

9. $7.1(2^b)$

10. $b^4 - 600$

11. $b + b$

12. $(3b)^2$

Evaluate the expression. (1.3)

13. $3 + 20 \div 5 - 2^2$

14. $(28 \div 7)^2 - 3^2$

15. $\frac{10.1 - 3^2}{20 - 3 \cdot 4}$

16. $4^2 + 2.4 \div 2.4 - 1$

Check whether the given number is a solution of the equation or inequality. (1.4)

17. $4a - 5 = 7; 3$

18. $x^3 - x^2 = 4; 2$

19. $5.4y - 4 > 18; 4$

20. $2.8x - 5 \leq 13; 6$

Write the verbal phrase as an algebraic expression, an equation, or an inequality. (1.5)

21. nine times a number

22. x is greater than twenty

23. Quotient of a and five

24. Product of a and b is less than ten

Solve each problem. (1.5)

25. If you save $25 a month, how many months must you save to buy a stereo costing $225?

26. You are given $90 to buy CDs for the student dance. Each CD costs $15. How many CDs can you buy?

27. A 150-pound student burns 5.4 calories per minute jogging. If the student jogs for 30 minutes, how many calories does the student burn?

Describe the domain and range of the function. (1.7)

28.

Input	0	2	4	6	8	10
Output	7	10	12	15	17	21

29.

Input	0	10	20	30	40	50
Output	21	25	28	32	35	43