NAME _____ DATE _____ PERIOD _____

Test, Form 2B

Write the letter for the correct answer in the blank at the right of each question.

1. Which of the following sets of values completes the function table?

Input (x)	$2x + 6$	Output (y)
3	$2(3) + 6$	
9	$2(9) + 6$	
17	$2(17) + 6$	

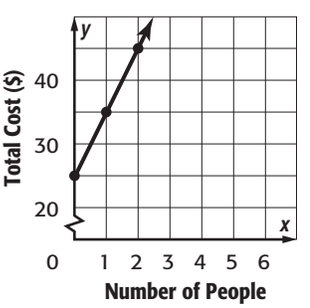
A. 6, 18, 34 **B.** 12, 24, 40 **C.** 12, 18, 26 **D.** 0, 12, 28 **1.** _____

2. What is the rule to find the value of the missing term in the table?

Position	1	2	3	4	n
Value of Term	5	6	7	8	

F. $n + 1$ **G.** $n + 4$ **H.** $5n$ **I.** $4n + 1$ **2.** _____

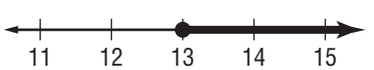
3. The graph shows the total cost of a zoo membership for a family. Which equation can be used to find the total cost y for any number of family members x?



A. $y = 10x$ **C.** $y = 10x + 25$

B. $y = 25x$ **D.** $y = 25x + 10$ **3.** _____

4. Which inequality is graphed below?



F. $r \leq 13$ **G.** $r < 13$ **H.** $r \geq 13$ **I.** $r > 13$ **4.** _____

5. Which of the following is a solution of the inequality $3x \geq 15$?

A. 0 **B.** 2 **C.** 4 **D.** 6 **5.** _____

6. Which of the following inequalities has the solution shown below?

F. $4n \geq 20$ **G.** $4n \leq 20$ **H.** $4n > 20$ **I.** $4n < 20$ **6.** _____

Solve each inequality.

7. $x - 3 \leq 7$

A. $x \leq 4$ **B.** $x \geq 4$ **C.** $x \geq 10$ **D.** $x \leq 10$ **7.** _____

8. $3b < 18$

F. $b < 6$ **G.** $b > 6$ **H.** $b > 54$ **I.** $b < 54$ **8.** _____

9. $\frac{y}{3} > 9$

A. $y > 3$ **B.** $y < 3$ **C.** $y > 27$ **D.** $y < 27$ **9.** _____

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Test, Form 2B *(continued)*

For Exercises 10–12, find the rule for each function table.

10.

Input (x)	Output (y)
1	4
2	8
4	16

11.

Input (x)	Output (y)
0	0
3	1
9	3

12.

Input (x)	Output (y)
3	1
5	3
8	6

10. _____

11. _____

12. _____

Use the table below for Exercises 13 and 14.

Position	1	2	3	4	n
Value of Term	8	16	24	32	■

13. Use words and symbols to describe the value of each term as a function of its position.

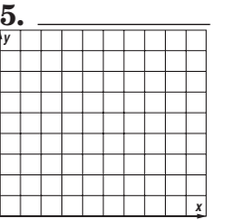
13. _____

14. Find the value of the fifteenth term in the sequence.

14. _____

15. A gym charges a \$35 registration fee plus an additional \$20 for each month that you attend. Write an equation that could be used to find the total cost y for someone to attend the gym for any number of months x. Then graph the equation.

15. _____



16. Lauretta is buying DVDs that cost \$9 each. She has a coupon for \$6 off her total purchase. Write an equation to find c the total amount she will spend on any number of DVDs d. Then use the equation to find the amount she will spend if she buys 8 DVDs.

16. _____

Write an equation to represent the function.

17.

Input, x	1	2	3	4
Output, y	3	6	9	12

18.

Input, x	1	2	3	4
Output, y	2	6	10	14

17. _____

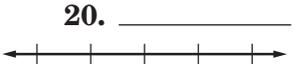
18. _____

19. Is 11, 12, or 13 a solution of the inequality $3x < 36$?

19. _____

20. Write an inequality to represent the statement *Hugo can spend no more than \$10 on lunch.* Then graph the inequality on a number line.

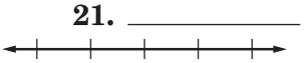
20. _____



Solve each inequality. Graph the solution on a number line.

21. $x - 4 \geq 12$

21. _____



22. $\frac{x}{12} < 2$

22. _____