Block 4 Review ~ Integers and Functions

Name_____

1. Which of the following statements are true? Circle all that apply.

A.
$$|-8| = -8$$

B. $|-8| = \frac{1}{8}$
C. $|-8| = |8|$
D. $|-8| = 8$
E. $|-8| = -\frac{1}{8}$

2. Annual rainfall in a town was 3 inches less than normal. What integer represents this situation?

A. -3 B. 0 C. 3 D. 3 and -3

3. Which of the following statements are true? Circle all that apply.

A. 5 > 7	B. $-5 > -7$
C4 < 3	D. $0 > -3$
E. $-2 < -10$	F. $-8 = -8.0$

4. Which of following lists is in order from least to greatest?

A. -5, -9, -1, 2 B. -5, -1, 2, -9 C. -9, -5, -1, 2 D. -1, 2, -5, -9 For numbers 5a – 5c, determine whether each statement is true or false. Use the graph below.



- **5a.** The ordered pair representing TRUE FALSE point S is (-2, 3).
- **5b.** The ordered pair representing TRUE FALSE point E is (1, -6).
- **5c.** Point E is on the *x*-axis. TRUE FALSE

6. Three vertices of a square are located at (2, 5), (-1, 5) and (-1, 2). What is the location of the fourth vertex?

A. (2, -1) B. (5, 2) C. (2, 2) D. (5, -1)

7. Which of the following statements are ALWAYS true? Circle all that apply.

A. A square is a rhombus.

- B. A rectangle is a square.
- C. A parallelogram is a rectangle.
- D. A square is a trapezoid.
- E. A rectangle is parallelogram.

8. The input-output table shows three values for the function rule y = 4 + 5x. What is the missing value?

missing value:	Input	Output
A. 5	x	У
B. 15	0	4
C. 24	3	19
D. 39	7	

9. The input-output table shows three values for the function rule y = 3 + 1.5x. What is the missing value?

8	Input	Output
A 15	x	У
A. 4.5	0	3
B. 7.5	2	6
C. 9	5	
D. 10.5		

10. What are the three ordered pairs from the input-output table shown below?

A. $(2, 8), (3, 6), (6, 0)$ B. $(8, 2), (6, 2), (0, 6)$	Input x	Output y
D. $(0, 2), (0, 3), (0, 0)$ C $(2, 3), (6, 8), (6, 0)$	2	8
D $(6, 2)$ $(3, 8)$ $(0, 6)$	3	6
D. (0, 2), (3, 0), (0, 0)	6	0

11. What is the function rule for the inputoutput table shown below?

Input	Output
x	У
0	7
1	5
2	3
3	1

A.
$$y = 2 + 7x$$

B. $y = 7 - 2x$
C. $y = 1 + 2x$

D. y = 1 - 7x

12. What is the start value and amount of change of the function rule y = 6 + 3x?

- A. Start Value: 3 Amount of Change: Add 6
- B. Start Value: 6 Amount of Change: Add 3C. Start Value: 3
- Amount of Change: Subtract 6
- D. Start Value: 6 Amount of Change: Subtract 3

13. What is the function rule for the graph shown below?



14. Which of the graphs below shows the linear function y = 2x + 3?



15. Which of the following graphs below shows the linear function represented in the input-output table?

Input	Output
X	У
0	5
1	4
2	3
3	2





For numbers 16a – 16c, use the recursive sequence below. Circle YES or NO for each statement.

4, 8, 12, ____, ____

16a. The repeated operation is addition.	YES	NO
16b. The start value is 4.	YES	NO

16c. The next two terms of the sequence are 16 and 20. YES NO

17. What are the missing terms in the recursive sequence?



- A. 4, 10B. 5, 11C. 10, 16
- D. 6, 18

18. Which graph represents x < -1?



19. Kayla has more than \$10 in her pocket. Which inequality represents the amount of money, *m*, that is in Kayla's pocket?

- A. m > \$10B. m < \$10C. $m \ge 10
- D. $m \le \$10$