LEVEL



Assessment



Name_____ Unit Pretest

Circle the letter of the correct answer.

1. If 2(4 + a) = 12, what is the value of *a*? **A** 2 В 1 **C** 4 **D** 3 **2.** If 5n - 3 + 2n = 25, what is the value of *n*? **A** 3 **B** 2 **C** 5 **D** 4 **3.** If 6d - 1 = 3d + 17, what is the value of *d*? **A** 5 **B** 8 **C** 6 D 7 **4.** If 3(2x + 4) = 2(5 + 4x), what is the value of x? **A** 2 **B** 1 **C** 4 **D** 3

Use this graph to do questions 5–7.

Date _____



Date _____

Circle the letter of the correct answer.

Use this table to do questions 8–11.

UNIT

Input	Output
1	4
2	8
3	
4	16
5	20

- **8.** What is the rule on which the table is based?
 - A output -3 = input
 - **B** input + 6 =output
 - **C** output = input \times 4
 - **D** input \times 6 = output
- 9. What is the equation for the rule?
 - **A** $o = 4 \div i$
 - **B** o = 18 i
 - **C** *o* = 4*i*
 - **D** o = i + 12
- **10.** What is the missing value in the table?

Α	12	С	9
В	10	D	15

- **11.** If the input value in the table was 9, what would the output be?
 - A 13 C 81
 - **B** 29 **D** 36

Use this situation to answer questions 12–14.

The cost of a taxi is \$4 plus \$6 for each mile driven.

- **12.** Which equation matches the situation?
 - **A** 4 = 6m c
 - **B** c = 4 + 6m
 - $C \quad m = c + 6 \times 4$
 - **D** $6 = 4 + c \times m$
- **13.** What is the constant in the situation?
 - **A** 6
 - **В** с
 - **C** m
 - **D** 4
- **14.** What would the cost of a taxi be if the ride was 5 miles?
 - **A** \$24
 - **B** \$26
 - **C** \$34
 - **D** \$50

Date _____

Circle the letter of the correct answer.

Use this graph to do questions 15–17.



15. What is the rise for the line?

Α	2	С	4
В	3	D	5

16. What is the run for the line?

 A
 6
 C
 5

 B
 4
 D
 7

17. What is the equation for the line?

Α	y = 2x	C	$y = \frac{1}{2}x$
В	y = x	D	$y = \frac{5}{7}x$

- **18.** Which of these is a nonlinear function?
 - A y = 2x
 - **B** $y = x^2$
 - **C** $y = \frac{1}{2}x$
 - **D** y = x + 2
- **19.** Which of these will have the greatest value of *y* when x = 4?
 - **A** $y = x^{3}$
 - **B** y = 3x
 - **C** y = 3x + 2
 - **D** $y = x^2$
- **20.** If $y = x^3 + 4$, what is the value of *y* when x = -2?
 - **A** 12
 - **B** 8
 - **C** -8
 - D -4

п З	Name	Date	
	Unit Posttest		

Circle the letter of the correct answer.

1.	If $7(c - 4) = 14$, what is the value of <i>c</i> ?	Use this graph to do questions 5–7.
2.	A 4 B 7 C 6 D 5 If $3n - 12 + 4n = 9$, what is the value of <i>n</i> ? A 1 B 4 C 2 D 3	10 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 10 x
3.	 If 4e - 10 = 2e + 8, what is the value of e? A 9 B 3 C 5 D 4 	 5. What is the rise of the line? A 2 B 5 C 3 D 4
4.	If $5(3x - 4) = 2(9 - 2x)$, what is the value of x? A 4 B 2 C 3 D 5	6. What is the run of the line? A 3 B 2 C 5 D 4 7. What is the slope of the line? A $\frac{4}{5}$ B $\frac{1}{4}$ C $\frac{5}{4}$ D $\frac{1}{5}$

UNIT

Circle the letter of the correct answer.

Use this table to do questions 8–11.

Input	Output
1	6
2	12
3	
4	24
5	30

- **8.** What is the rule on which the table is based?
 - A output = input \times 6
 - **B** input + 10 = output
 - **C** input \times 3 = output
 - **D** output -5 = input
- **9.** What is the equation for the rule?
 - A $o = 6 \div i$

B
$$o = i \times 5$$

- **D** o = 20 i
- **10.** What is the missing value in the table?

Α	14	C	16
B	10	D	18

11. If the input value in the table was 9, what would the output be?

A 39 **C** 81

B 54 **D** 96

Use this situation to answer questions 12–14.

The cost of a canoe rental at a lake is \$6 plus \$8 for each hour used.

- **12.** Which equation matches the situation?
 - **A** c = 6 + 8h
 - **B** $6 = h \times c$
 - **C** 8 = 6 − *c*
 - **D** h = 6c 8
- **13.** What is the constant in the situation?
 - **A** 8
 - **B** 6
 - **С** с
 - D h
- **14.** What would the cost of a canoe be if you used it for 4 hours?
 - **A** \$48
 - **B** \$32
 - **C** \$38
 - **D** \$56

Date _____

Circle the letter of the correct answer.

Use this graph to do questions 15–17.



15. What is the rise for the line?

Α	2	C	4
В	3	D	5

16. What is the run for the line?

Α	3	C	4
В	6	D	5

17. What is the equation for the line?

A
$$y = x$$

B $y = \frac{2}{5}x$
C $y = 2x$
D $y = \frac{4}{3}x$

18. Which of these is a nonlinear function?

A
$$y = 3x$$

B $y = 3 + x$
C $y = \frac{1}{3}x$

D
$$y = x^3$$

19. Which of these will have the greatest value of *y* when x = 5?

A
$$y = x^2$$

B
$$y = 3x$$

C
$$y = x^{3}$$

D
$$y = 2 + x$$

20. If $y = x^3 + 5$, what is the value of *y* when x = -3?

- **B** −27
- **C** 13
- **D** 32





Assessment



