

NAME

Answer Key

DATE

PERIOD

CHAPTER 8 STUDY GUIDE

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)	$3x - 4$	Output (y)
5	$3(5) - 4$	11
9	$3(9) - 4$	1 23
19	$3(19) - 4$	1 53

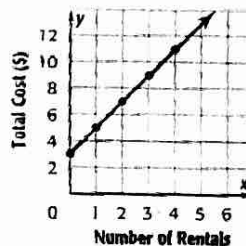
1. _____

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	10	15	20	1

2. 5n

3. The graph shows the charges for a movie rental club in a month. Which equation can be used to find the total charge y for any number of rentals x in a month?

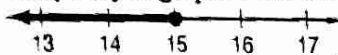


- A. $y = 2x$
B. $y = 3x$

- C. $y = 2x + 3$
D. $y = 3x + 2$

3. C

4. Which inequality is graphed below?



F. $x \geq 15$

G. $x < 15$

H. $x \leq 15$

I. $x > 15$

4. H

5. Which of the following is a solution of the inequality $m - 12 < 20$?

A. 34

B. 33

C. 32

D. 31

5. D

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



F. $6n > 24$

G. $6n \geq 24$

H. $6n \leq 24$

I. $6n < 24$

6. G

Solve each inequality.

7. $c - 7 \leq 10$

7. $c \leq 17$

8. $4b > 20$

8. $b > 5$

9. $\frac{d}{4} < 16$

9. $d < 64$

Study Guide 8 *(continued)*

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

10.

Input (x)	Output (y)
1	3
2	4
4	6

11.

Input (x)	Output (y)
0	0
3	9
6	18

12.

Input (x)	Output (y)
4	1
8	2
12	3

10. $x + 2$
 11. $3x$
 12. $\frac{x}{4}$

Use the table below for Exercises 13 and 14.

Position	9	10	11	12	n
Value of Term	3	4	5	6	

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

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

15. A summer camp charges a \$25 registration fee plus an additional \$10 for each day that someone attends the camp. Write an equation that could be used to find the total cost y for someone to attend the camp for any number of days x . Then graph the equation.

16. Hugo is buying DVDs that cost \$15 each. He has a coupon for \$5 off his total purchase. Write an equation to find c the total amount he will spend on any number of DVDs d . Then use the equation to find the amount he will spend if he buys 6 DVDs.

Write an equation to represent the function.

17.

Input, x	1	2	3	4
Output, y	4	8	12	16

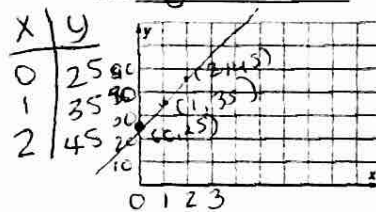
18. Is 12, 13, or 14 a solution of the inequality $4x > 52$?

19. Write an inequality to represent the statement *band practice will be no longer than 45 minutes*. Then graph the inequality on a number line.

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

20. $x - 9 < 14$

21. $\frac{n}{6} \geq 3$



13. $n - 6$
 14. 10
 15. $y = 25 + 10x$
 16. $c = 15d - 5$
 $c = 15(6) - 5$
 $c = 85$
 17. $4x = y$

18. 14
 19. $b \leq 45$

