

Unit 4: Direct Proportion & Inequalities

Name: _____

Per: _____

KEY

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

- A) 0, 1, 2 **B) 5, 8, 11**
 C) 5, 6, 7 D) 6, 9, 12

Input (x)	$3x - 1$	Output (y)
2	$3(2) - 1$	■
3	$3(3) - 1$	■
4	$3(4) - 1$	■

Use the table below for questions 2 – 4.

2) Mrs. Miller is buying hot dog buns for a cookout. Using the table as a guide, how many packages will she need to buy to have 48 buns?

- A) 16** B) 18 C) 10 D) 12

x (packages)	1	2	3	4	n
Y (buns)	3	6	9	12	■

3) What is the rule to find the value of the missing term?

- A) $y = \frac{3}{x}$ **B) $y = 3x$** C) $y = x + 2$ D) $y = x + 3$

4) What is the value of y if x -value is 8 (using the equation you used in #3)?

- A) 9 B) 15 **C) 24** D) 36

Use the following information for questions 5-6. Malia earns \$5 for every hour that she babysits.

5) Which equation can be used to find t , the total amount Malia will earn after babysitting h hours?

- A) $h = 5 + t$ B) $t = 5 + h$ C) $h = 5t$ **D) $t = 5h$**

6) How much will Malia earn if she babysits for 8 hours?

- A) \$10 B) \$25 **C) \$40** D) \$50

7) Which of the following is a solution to the inequality $b < 7.6$?

- A) 7.5** B) 7.6 C) 7.8 D) None of these

8) Which of the following is a solution of the inequality $y - 5 \geq 8$?

A) 8

B) 10

C) 12

D) 15

9) Which inequality is graphed



A) $t \geq 2$

B) $t \leq 2$

C) $t > 2$

D) $t < 2$

10) The inequality $h \geq 48$ represents the minimum height h necessary to ride a certain roller coaster. Who can ride the roller coaster?

A) Sara only

B) Anna only

C) Anna & Sara

D) Anna, Patrick & Miguel

Heights (in.)	
Miguel	42
Patrick	45
Anna	48
Sara	52

11) Zachary can spend at most \$100 on new clothes. Which inequality represents this situation?

A) $s < 100$

B) $s > 100$

C) $s \leq 100$

D) $s \geq 100$

12) Which table matched the equation $y = 6.2x$?

A)

X	3	4	5	6
Y	18.6	24	14.4	20.6

B)

X	6.2	12.4	18.6	24.8
Y	1	2	3	4

C)

X	5	6	7	8
Y	31	36	49	48.2

D)

X	2	4	6	8
Y	12.4	24.8	37.2	49.6

13) How many solutions does the inequality $x \geq 4$ have?

A) None

B) One, x can only equal 4

C) Five, x can equal 0, 1, 2, 3 & 4

D) Infinitely many solutions