TAHNOON BIN MOHAMMED (2021-2022)
MATH QUIZ (GRADE 6) - TERM 2
CHAPTER 8 - FUNCTIONS AND INEQUALITIES

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)	$4x + 2$	Output (y)
4	$4(4) + 2$	■
5	$4(5) + 2$	■
6	$4(6) + 2$	■

   A. 16, 20, 24   **C.** 18, 22, 26

   B. 18, 19, 20   **D.** 0, 1, 2   1. _____

2. Molly is buying packages of party favors for her birthday party. Using the table as a guide, how many packages will she need to buy to have 24 favors?

Party Favors	
Number of Packages	**Number of Favors**
3	6
6	12

   F. 8   **H.** 12

   G. 10   **I.** 14   2. _____

Use the table below for Exercises 3 and 4.

Position	1	2	3	4	n
Value of Term	2	4	6	8	■

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

   A. $\frac{2}{n}$ **B.** $n + 2$ **C.** $2n$ **D.** $n - 2$ 3. _____

4. What is the value of the twelfth term in the sequence?

   **F.** 10   **G.** 12   **H.** 16   **I.** 24   4. _____

5. The graph shows the total money earned at a fundraising car wash. Which equation can be used to find the total earned y for the number of cars washed x?

   A. $y = x + 5$ **C.** $y = 5x$
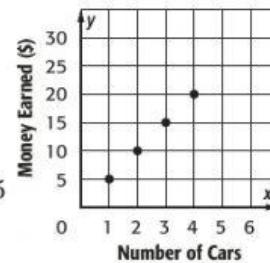
   B. $y = \frac{x}{5}$ **D.** $y = x - 5$ 5. _____

6. A pizzeria charges \$12 per pizza plus an addition \$3 for delivery. Which equation represents the cost of having any number of pizzas delivered?

   F. $c = 12p$ **G.** $c = 3p$ **H.** $c = 12p + 3$ **I.** $c = 12 + 3p$ 6. _____

Use the following information for Exercises 7–9. Ryan earns $20 for every lawn that he mows.

7. Which equation can be used to find t, the total amount Ryan will earn after mowing n lawns?

   A. $t = 20n$ **B.** $n = 20t$ **C.** $t = 20 + n$ **D.** $n = 20 + t$

   7. _____

8. How much will Ryan earn if he mows 15 lawns?

   F. $40   **G.** $150   **H.** $200   **I.** $300

   8. _____

9. Which set of ordered pairs represents the relationship between the number of lawns Ryan mows and the money he earns?

   A. $(20, 1), (40, 2), (60, 3)$ **C.** $(1, 20), (2, 40), (3, 60)$

   B. $(1, 20), (2, 30), (3, 40)$ **D.** $(0, 20), (1, 40), (2, 60)$

   9. _____

10. Which of the following is a solution of the inequality $h + 9 < 20$?

    F. 13   **G.** 12   **H.** 11   **I.** 10

    10. _____

11. The inequality $a < 10$ represents the ages a that qualify for a child ticket. Which children in the Rogers' family qualify for a child ticket?

    A. Chris, Megan, Piper

    B. Piper only

    C. Chris and Megan

    D. Piper and Mark

Rogers' Family Ages	
Chris	5
Megan	8
Piper	10
Mark	12

    11. _____

12. Which inequality is graphed below?
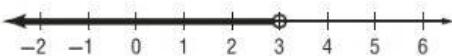
    F. $x \geq 3$ **G.** $x < 3$ **H.** $x \leq 3$ **I.** $x > 3$

    12. _____

13. Miguel has at least $250 in his savings account. Which inequality represents this situation?

    A. $m < 250$ **B.** $m > 250$ **C.** $m \leq 250$ **D.** $m \geq 250$

    13. _____

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

    F. $3x \leq 6$ **G.** $3x < 6$ **H.** $3x \geq 6$ **I.** $3x > 6$

    14. _____

Solve each inequality.

15. $3 + x \geq 12$

    A. $x \geq 9$ **B.** $x \geq 15$ **C.** $x \leq 9$ **D.** $x \leq 15$

    15. _____

16. $5x < 30$

    F. $x < 150$ **G.** $x < 6$ **H.** $x > 150$ **I.** $x > 6$

    16. _____

17. $\frac{x}{3} \leq 6$

    A. $x \leq 2$ **B.** $x < 2$ **C.** $x \leq 18$ **D.** $x < 18$

    17. _____

Course 1 • Chapter 8 Functions and Inequalities