

23. The rates of change of two functions are being compared. One function, $f(x)$, is represented by the equation $f(x) = 4x + 2$, while the other function, $g(x)$, is represented in the function table below.

x	$g(x)$
-1	-2
1	4
2	7
5	16

Which statement is true?

- A. The rate of change of $f(x)$ is greater than the rate of change of $g(x)$.
- B. The rate of change of $g(x)$ is greater than the rate of change of $f(x)$.
- C. The rates of change of $f(x)$ and $g(x)$ are equal.
- D. The rates of change cannot be compared because $f(x)$ is a linear function and $g(x)$ is an exponential function.

24. The table below shows the values of a function.

x	$f(x)$
4	7
6	11
8	15
10	19

Which best describes the function, based on the average rates of change?

- A. The function is linear because the average rates of change are all the same, 2.
- B. The function is not linear because each average rate of change is 2 times the previous rate of change.
- C. The function is linear because the average rates of change are all the same, 4.
- D. The function is not linear because each average rate of change is 4 times the previous rate of change.

25. Which statement best describes the relation recorded in the following table?

x	2	5	8	11	14	17
y	6	6	6	6	6	6

- A. It is a function because each input value is mapped to one and only one output value.
- B. It is a function because each output value is mapped to one and only one input value.
- C. It is not a function because at least one input value is mapped to more than one output value.
- D. It is not a function because at least one output value is mapped to more than one input value.