Algebra Quick Quiz10102023

Name.....

Periods.....

Choose the best answer for each question:

You may want to have your graphing calculator handy.

1. Which of the relations below is a function?

Choose:

- ○ {(1,1), (2,1), (3,1), (4,1), (5,1)}
- ○ {(2,1), (2,2), (2,3), (2,4), (2,5)}
- ○ {(0,2), (0,3), (0,4), (0,5), (0,6)}

2. Given the relation $A = \{(5,2), (7,4), (9,10), (x, 5)\}$. Which of the following values for x will make relation A a function?

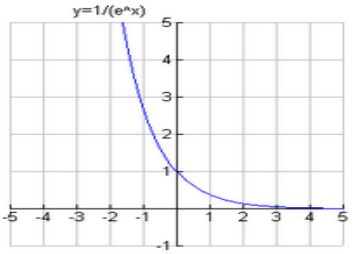
Choose:

- ○ 7
- ○ 9
- ○ 4

3. The graph of a relation is shown at the right. Is this relation a function?

Choose:

- ○ Yes
- ○ No
- ○ Cannot be determined from a graph



4.

Is the relation depicted in the chart below a function?

X	0	1	3	5	3	9
Y	8	9	10	6	10	7

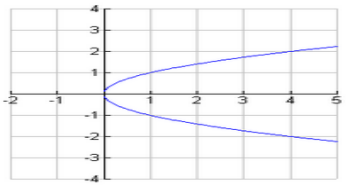
Choose:

- ○ Yes
- ○ No
- ○ Cannot be determined from a chart

5. The graph of a relation is shown at the right. Is the relation is a function?

Choose:

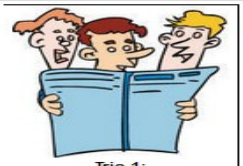
- ○ Yes
- ○ No
- ○ Cannot be determined from a graph



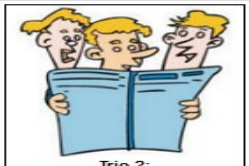
6. Examine the singers at the right.

A relation can be described as:
$(x, y) = (boy's\ name, hair\ color)$

or described as:
$(x, y) = (hair\ color, boy's\ name)$



Trio 1:
Trino, Greg, Darius



Trio 2:
Matt, Norman, Julius

For which of the trios will BOTH relations described above be functions?

Choose:

- ○ Trio 1
- ○ Trio 2
- ○ Both trios

7

. Given $f(x) = 3x + 7$, find $f(5)$.

Choose:

- ○ 15
- ○ 22
- ○ 42

8

. Use functional notation to describe the function displayed at the right.

Choose:

- ○ $f(x) = 2x$
- ○ $f(x) = x^2$
- ○ $f(x) = x + 2$

x	y
-3	9
-2	4
-1	1
0	0
1	1
2	4
3	9

9. Given $f(x) = 2x^2 - 3x + 6$, find $f(2.5)$.

Choose:

- ○ 11
- ○ 23.5
- ○ 76

10. Given $g(a) = 2a - 4$, find $g(5x)$.

Choose:

- ○ 6
- ○ $5x - 4$
- ○ $10x - 4$

11.

Bonus

Which graph represents the solution set for $\frac{1}{2} - \frac{2}{3}x < \frac{5}{6}$?