*Unit 1 Test REVIEW– Functions & Inverses* Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1. Identify the following Key Features**

Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Increasing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Decreasing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Positive: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Negative: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Maximum: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Relative Absolute

Minimum: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Relative Absolute

X-intercept(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is the graph a function? YES or NO



**Find the inverse of the following functions.**

2. 3.

4. 5.

|  |  |
| --- | --- |
| **x** | **f(x)** |
|  |  |
|  |  |
|  |  |
|  |  |
| 3 | 4 |

6. Given the table of values for f(x), what is ? \_\_\_\_\_\_\_\_\_

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8. Given the table of values for f(x) what is ? \_\_\_\_\_\_\_\_\_

9. \_\_\_\_\_\_\_A function is shown below. What is the value of the expression

 for

 for

 for



10. \_\_\_\_\_\_\_The graph of the function will be shifted left 8 units and down 5 units, reflected over the x-axis. Which is the function that corresponds to the resulting graph?

1. c.
2. d.

11. Use the piecewise function below to answer the following questions”

12. What is the value of = \_\_\_\_\_\_\_ 13. What is the value of = \_\_\_\_\_\_\_

14. What is the value of = \_\_\_\_\_\_\_\_\_\_\_ 15. What is the value of = \_\_\_\_\_\_\_

16. Given the following equation, explain the transformation in words:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. Given the parent function (solid) and transformation (dotted), list the transformations the occurred.

