Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Honors Math 3 Unit 1 Review**

***Using words, describe the transformation of the parent function f(x) that will occur when graphing g(x):***

1. 2.

***Graph each function. Give the domain and range for questions 4 – 8, 11, and 12.***

3. 4.

5. 6.

7. 8.

9. 10.

11. 12.

***Evaluate the functions at the following values:***

a) f (- 4) = \_\_\_\_\_\_\_ b) f (2) = \_\_\_\_\_\_\_\_ c) f (6) =\_\_\_\_\_\_\_\_

14. a) f (- 4.2) = \_\_\_\_\_\_\_ b) f (0.1) = \_\_\_\_\_\_\_\_ c) f (6.5) =\_\_\_\_\_\_\_\_

***Solve:***

15. 16.

***Determine if the following are inverses – if not, give the correct inverse:***

17. 18.

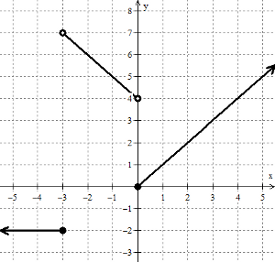
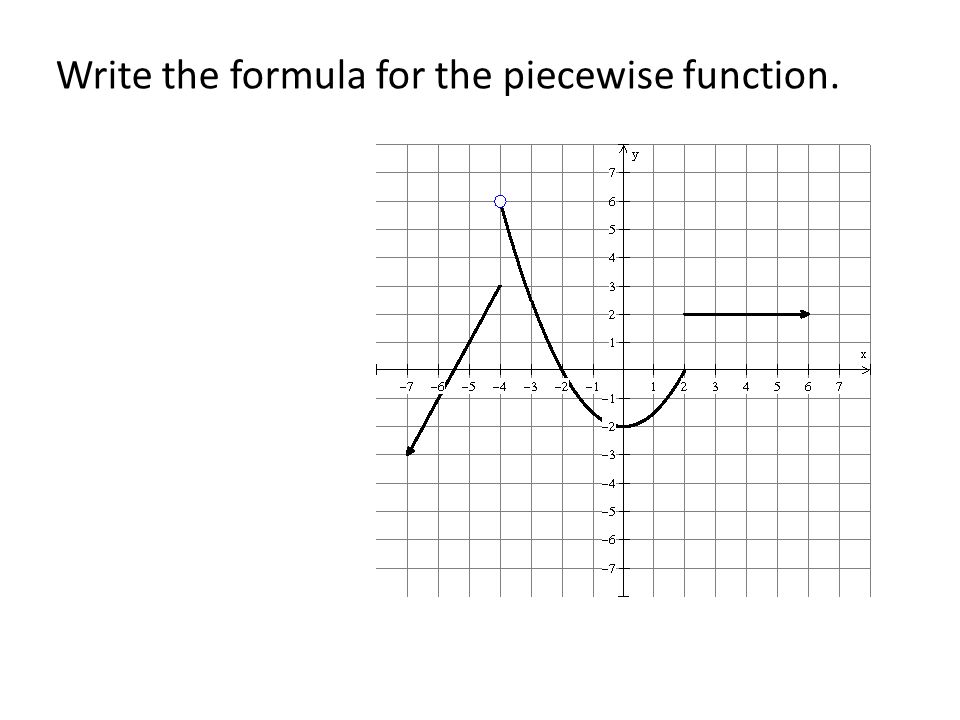
***Evaluate the following if , , and .***

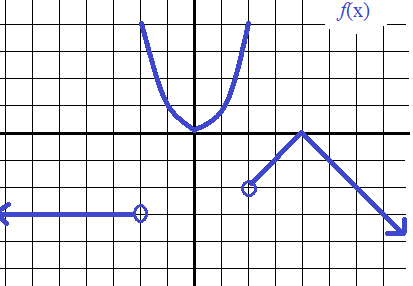
19. 20. 21.

22. 23. 24.

25. Residential wastewater rates are based on a monthly customer charge of $4 plus $1.75 per 1000 gallons of water used. Write a step function to represent the monthly cost, c, in dollars for x gallons of water used.

Write the equations of the functions shown below:

26.  27. 

28.