I. Use the pictured graph of g(x) for #1 and #2.

1. Evaluate each:

a) b) c) d)

e) f) g) h) g(-3)

2. Determine whether or not the graph is continuous for each interval. Be sure to state why/why not.

a) [2,4] b) (-2,1) c) [0,3) d) [-6,-2]

II. Write a limit statement based on the table:

|  |  |
| --- | --- |
| x | y |
| 4.9 | 2.51 |
| 4.99 | 2.9501 |
| 4.999 | 2.995 |
| 5 | DNE |
| 5.0001 | 3.0005 |
| 5.001 | 3.005 |
| 5.01 | 3.0501 |

|  |  |
| --- | --- |
| x | y |
| 1.9 | -.995 |
| 1.99 | -.9995 |
| 1.999 | -.99995 |
| 2 | DNE |
| 2.001 | -.99995 |
| 2.01 | -.9995 |
| 2.1 | -.995 |

3. 4.

III. Evaluate each:

5. 6. 7.

8. 9. 10.

11. 12. 13.

14. 15. 16.

17. 18. 19.

20. 21. 22.

23. Find

IV. Is the function continuous at x = 15? Be sure to justify, citing your definition of continuity.

24.

25.

26.

V. AP Practice:

27. 

28.

29. 

30.