

Calculus 1
Test 1
Number 7

Customer question:

I'm taking test 1. Question 7 does not appear to be a function. I looked at the answer key graph to see if maybe there was a typo in the intervals given in the question, but I see that the solution graph does not pass the vertical line test at $x=1$. What am I missing here?

Our Answer:

Yes, that's a typo. Nice Catch! There are actually two errors to watch out for here. In the function where it says "x if $-1 \leq x \leq 1$ " that should be

x if $-1 \leq x < 1$

(Notice that the second inequality symbol became simply "less than" instead of "less than or equal to")

So then on the graph, at $(1,0)$ that should be an open circle, not a closed as is currently drawn.

With these corrections, the graph passes the vertical line test.