

**Topic:** Vertical line test

**Question:** If a perfectly vertical line crosses the graph at more than one point, the graph fails the vertical line test.

**Answer choices:**

- A      True
- B      False



**Solution: True**

A graph passes the vertical line test if it's impossible to draw a perfectly vertical line that crosses the graph more than once.

If you can draw a perfectly vertical line anywhere that will cross the graph more than once, then the graph fails the vertical line test, and the graph does not represent a function.



**Topic: Vertical line test**

**Question:** Which of the following will never pass the vertical line test and therefore will never be considered a function?

**Answer choices:**

- A      A horizontal line
- B      A cubic function
- C      A parabola
- D      A circle



**Solution: D**

A graph fails the vertical line test when you can draw a line that crosses the graph more than once. Since you'll always be able to draw a vertical line that crosses the graph of a circle more than once, a circle will always fail the vertical line test, and therefore can never be considered a function.

