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.