Worksheet 3: Graphing Functions

Name: _____   Date: _____

1. Which test can determine if a graph represents a function?

A) Horizontal line test

B) Vertical line test

C) Slope test

D) Y-intercept test

2. If a vertical line intersects a graph at two points, what does this mean?

A) The graph is a function

B) The graph is not a function

C) The graph has no y-intercept

D) The graph is linear

3. What is the y-intercept of the function f(x) = 2x + 5?

A) 2

B) 5

C) -5

D) 0

4. A function is increasing when:

A) As x increases, y decreases

B) As x increases, y increases

C) The graph is horizontal

D) The graph has no slope

5. A function is decreasing when:

A) As x increases, y increases

B) As x increases, y decreases

C) The graph goes straight up

D) The y-values never change

6. What does the maximum of a function represent?

A) The lowest point on the graph

B) The highest point on the graph

C) Where the graph crosses the x-axis

D) The slope of the line

7. What does the minimum of a function represent?

A) The highest point on the graph

B) The lowest point on the graph

C) Where the graph crosses the y-axis

D) The steepest part of the line

8. An x-intercept occurs when:

A) x = 0

B) y = 0

C) x = y

D) The graph is horizontal

9. A y-intercept occurs when:

A) y = 0

B) x = 0

C) x = y

D) The graph is vertical

10. If a graph passes the vertical line test, it means:

A) It's not a function

B) It has multiple y-intercepts

C) It is a function

D) It only has one point