Functions

Definition

Examples:

The four ways to represent a function:
1. Algebraically
2. Verbally
3. Tabularly
4. Graphically

The Vertical Line Test (VLT):

Why would not passing the VLT mean that a graph does not represent a function?

Other Properties of Functions:
A. Discontinuity

B. Maxima/Minima

C. Increasing/Decreasing
Examples

Find the domain and range of the following functions.

1. \( f(x) = 2x - 5 \)

2. \( h(x) = \frac{2x-5}{x+1} \)

3. \( y = \sqrt{\frac{2x-5}{x+1}} \)

4. \( g(y) = \sqrt{(3x - 2)(x + 1)} \)