

Graphing a Function Rule Guided Notes

Function Rule

A function rule is a mathematical rule that can be used to describe the general trend of the function. A rule can be taken as an **equation** representing any relationship.

A function Rule can be used to interpret the function as a graph.

How to graph a function rule?

If we are given a function rule, we can make a table of values satisfying the function rule and graph these points to discover the shape of the function. Here we will cover two types of function graphs:

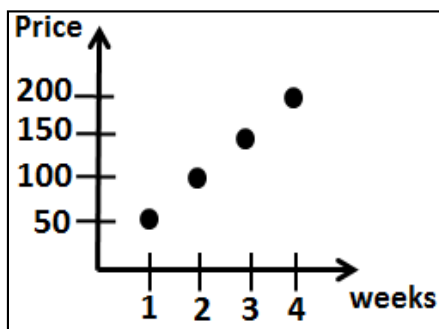
- Linear Function Graphs
- Nonlinear Function Graphs

Problem 1: What is the graph of the function rule $y = 2x + 1$?

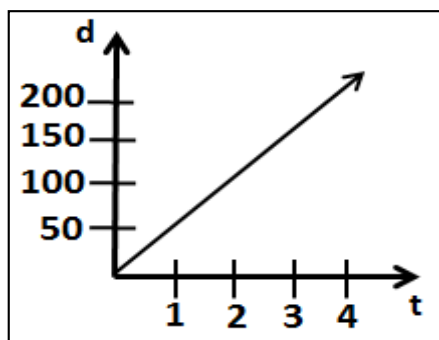
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Discrete and Continuous Graphs

- A **discrete graph** is composed of distinct isolated points on the graph.



- A **continuous graph** is a graph that is unbroken and data exists between plotted values.



Problem 2: John buys eggs at the supermarket. The function representing the cost per carton of eggs is $c = 1.5n + 1$ where c is the cost of the carton of eggs and n is the number of cartons. Graph the function and tell whether the function is continuous or discrete?