

Friday: Test on Relations & Functions

① Ordered Pairs, Mapping (Arrow) diagrams, graphs

② Function \Rightarrow Definition
 \Rightarrow Test ... Vertical Line

③ Domain & Range

④ Interpreting Graphs: Bar/Tab filling

⑤ Creating graph for a situation

⑥ Function Notation:

$$f(x) = 2x + 3$$

$$f(3) = 2(3) + 3$$

$$= 9$$

⑦ Linear Relations

\rightarrow Shape? Straight Line

\rightarrow Equation? Both variables to exponent 1

\rightarrow Table of Values? (Ind) x | y (dep)

0	3
2	7
4	11

\rightarrow Rate of Change:

$$\text{Roc} = \frac{\text{change in dependent}}{\text{change in independent}}$$

$$\text{Roc} = \frac{+3}{+2} = \frac{3}{2}$$

Roc from equation??

$$\text{Dependent Variable} = \boxed{\text{Roc}} \cdot \text{Independent Variable} + \text{Initial Amount} \quad (\text{y-Intercept})$$

ex $C = 25n + 70$

$$\text{Roc} = 25$$

$$\text{y-Int.} = 70$$

Discrete Data vs Continuous Data

\Rightarrow Not connected, just points

\Rightarrow connected Data

ex.

$$f(x) = -2x + 7$$

Find the domain value for a range value of 11.

$$f(x) \Leftrightarrow y$$

$$11 = -2x + 7$$

$$11 - 7 = -2x$$

$$\frac{4}{-2} = \frac{-2x}{-2}$$

$$\boxed{-2 = x}$$

Chapter Review

Pg. 326

3, 5, 6a, 7-18

PRactice Test

1-5