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UNIT 3: LINEAR RELATIONS AND FUNCTIONS

SECTIONS 5.6 AND 5.7: "PROPERTIES OF LINEAR RELATIONS" AND "INTERPRETING GRAPHS OF LINEAR FUNCTIONS"

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NUMBERS, RELATIONS AND FUNCTIONS 10

WHAT'S THE POINT OF TODAY'S LESSON?

We will continue working on the NRF 10 Specific Curriculum Outcome (SCOs) "Relations and Functions 4 and 5" OR "RF4 and RF5" which state:

RF4: "Describe and represent linear relations using: words, sets of ordered pairs, tables of values, graphs and equations."

AND

RF5: "Determine the characteristics of the graphs of linear relations including the: intercepts, slope, domain and range."

What does THAT mean???

SCO RF4 means that we will:

* **identify independent and dependent variables in a given context**
* **determine whether a situation, a graph, a table of values, a set of ordered pairs or an equation represents a linear relation, and explain why or why not**
* **draw a graph from a set of ordered pairs within a given situation, and determine whether the relationship between the variables is linear**
* **match corresponding representations of linear relations**

What does THAT mean???

SCO RF5 means that we will:

* **determine the intercepts of the graph of a linear relation, and state the intercepts as values or ordered pairs**
* **determine the slope, domain and range of the graph of a linear relation**
* **sketch a linear relation that has one intercept, two intercepts or an infinite number of intercepts**
* **identify the graph that corresponds to a given slope and y-intercept**
* **determine the slope and y-intercept that corresponds to a given graph**
* **solve a contextual problem that involves intercepts, slope, domain or range of a linear relation**

WARM-UP:

Sketch a graph of the linear function f(x) = 5x - 10

value of x when y = 0

x-intercept:

$f(x) = 5x - 10$

$0 = 5x - 10$

$10 = 5x$

$2 = x$

$(2, 0)$

value of y when x = 0

y-intercept:

$f(x) = 5x - 10$

$f(0) = 5(0) - 10$

$f(0) = -10$

$(0, -10)$

$y = mx + b$

3rd point on line:

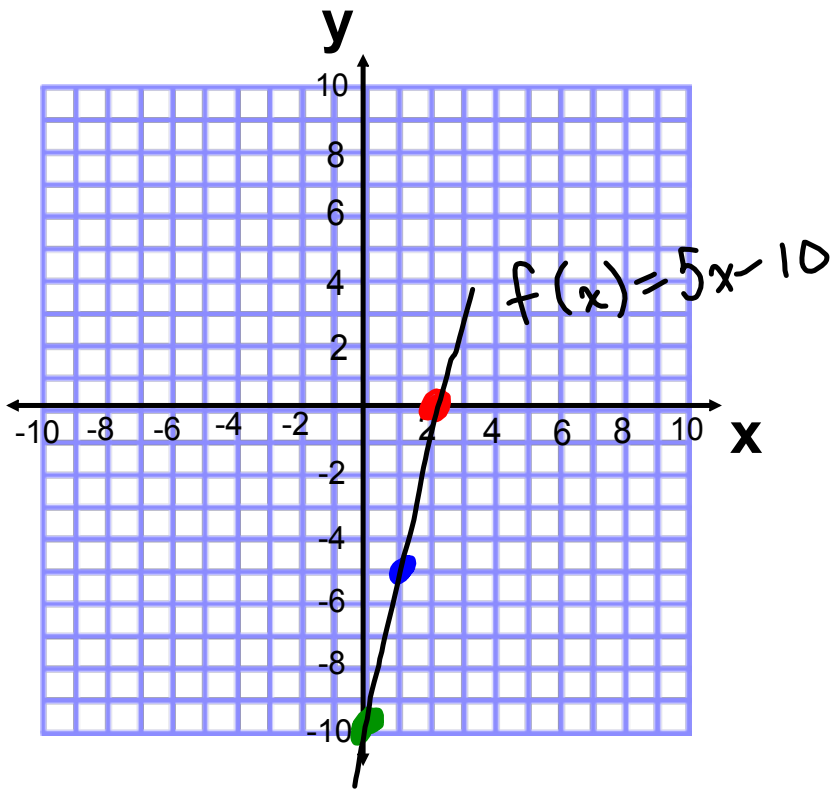
y-int.

$f(x) = 5x - 10$

$f(1) = 5(1) - 10$

$f(1) = -5$

$(1, -5)$



HOMEWORK QUESTIONS?
(pages 308 / 309, #3, #4, #5, #7, #12 & #14)

CONCEPT REINFORCEMENT:

***FPCM 10*:**

Page 310: **#16 & #17**
Page 319: **#4 TO #7**
Page 320: **#8 TO #10**
Page 321: **#11 TO #13**
Page 322: **#16**

Attachments

Worksheet - Function Notation.pdf