



Objective: Finding the Rate of Change / Slope of a Linear Function

Homework FN4 – The Doctor’s Dark Journey to Rate of Change Practice

Do Now: Use the table at the right.

1. Write the next two lines of the table.
2. Write a function rule for the table.
3. Does the range have any negative values?

x	y
2	6
3	11
4	18
5	27

Exam Prep: The range of the $y = x^2 - 3$ whose domain is $\{2, 4, 6\}$ is: A) $\{-1, 1, 3\}$ B) $\{1, 5, 9\}$ C) $\{1, 1, 9\}$ D) $\{1, 13, 33\}$

Find it on a Graph

To find the rate of change on a graph, just pick any two points and visually follow the path from left to right.

Here the rate of change of F1 is $\frac{-2}{7}$ because as the y-value decreases by 2, the x-value increases by 7.

Try it out: Find Rate of Change

F2
 $m = \underline{\hspace{2cm}}$

F3
 $m = \underline{\hspace{2cm}}$

F4
 $m = \underline{\hspace{2cm}}$

Compare Functions:
Which has a Greater Rate of Change

First find m.

F5: $m = \underline{\hspace{2cm}}$ F6: $m = \underline{\hspace{2cm}}$

F7: $m = \underline{\hspace{2cm}}$

F6

x	y
1	4
3	8
5	12
7	16
9	20

F7: $y = \frac{1}{3}x - 11$

Compare “m” values using $>$ or $<$.

F5 F6

F6 F7

F5 F7

Which is Greater?

F8: $m = \underline{\hspace{2cm}}$

F9: $m = \underline{\hspace{2cm}}$

F9

x	y
10	11
12	33
14	55
16	77
18	99

Which is Greater?

F10: $m = \underline{\hspace{2cm}}$

F11: $m = \underline{\hspace{2cm}}$

F11
 $y = x + 1$