

Linear Functions Staircase

"My youtube channel has 10 followers, and every day I get 5 more."

Fill out table, with dialog with students as follows:

Day (x)	Followers
0	10
1	15 = 10+5
2	20 = 15 + 5 = 10 + 5 + 5
3	25 = 20 + 5 = 10 + 5 + 5 + 5
4	30 = 25 + 5 = 10 + 5(4)
5	= 10 + 5(?)

- Complete this table for day 6 and 7? (show your calculations in the table)
- Skip to row 12. How many followers?
- Skip to row 22
- #3 is written $f(22) = 220$. ← "F of 12 equals 70"?
- [spoken:] What is $f(36)$?
- What would the formula be row for any day "x"? $f(x) =$
- What would the equation be if I started with 18 followers instead of 10?
- What would it be if I started with 15 followers and got 8 more every day?
- My friend Gary's account looks like this:
Day 0, 18
Day 1, 22
Day 2, 26
Day 3, 30
What calculation would you do for day 20?
- What is the formula for day x? $G(x)=$
- What is $G(12.5)$?
- "If we know the number of ____, we can find the amount of ____"
- Graph Gary's account, all the way to day 20:

