**Introduction to Ch. 4**

Objectives:

* How do the concepts from Ch. 4 relate to the real world?
* What are 1st and 2nd differences, and how can you use them to identify different families of functions?

Linear and Non-Linear Situations

* What do these 2 words mean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Non-Linear Functions

* They do not make…
* They are…
* We’re beginning…

Facebook Example

Some friends form a Facebook group and start posting on each others’ walls. If everyone posts twice per day on everyone’s wall (including their own), how many total posts will be made per day?

**Step 1: Try it with simple examples.**

1 Person

2 People

3 People

**Step 2: Look for a pattern in the answers.**

If there are 30 people…

If there are x people…

Introduction to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Functions

* The equation for the Facebook…
* Parent…
* Examples of…

Are these \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Functions?

* f(x) = x2
* f(x) =
* f(x) =

1st and 2nd Differences (please make the tables of values below)

