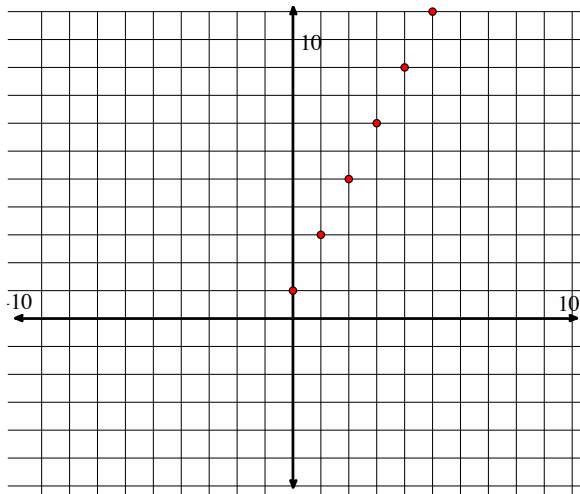# 4.2 Sequences Vs. Linear/Exponential Relationships
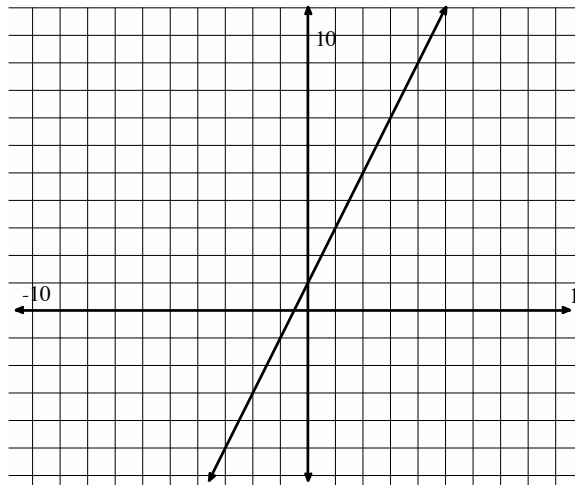
A Solidify Understanding Task

In each problem below, identify which relationship is a sequence and which is not. If it is a sequence, state what type (arithmetic/geometric) of sequence it is and how you know. If not, state why not.

1a.

1b.

2a.

x	y
-2	-9
-1	-4
1.5	8.5
2.5	13.5

2b.

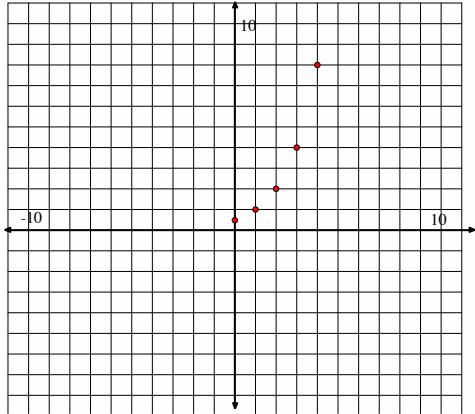| x	y
0	1
1	6
2	11
3	16

3a.
$f(1) = 3$
$f(n) = f(n-1) + 4$

3b.
$f(x) = 4x - 1$

4. What are the key elements that make a relationship a sequence?

5a.

5b.
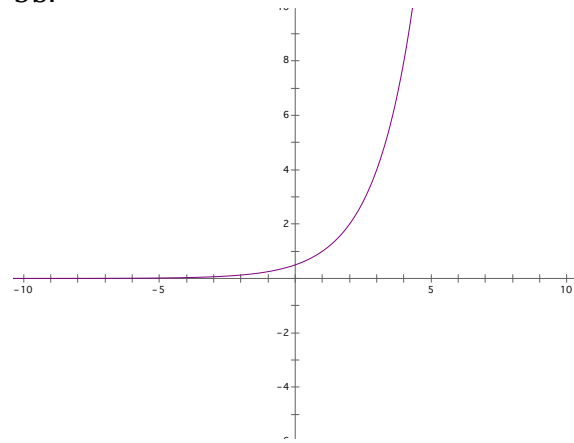
6a.

x	y
0	3
1.5	24
3	192
5	3072

6b.

x	y
0	3
1	12
2	48
3	192

7a.

$f(0) = 7$

$f(x) = f(x - 1) * 2$

7b.

$f(x) = 7(2)^x$

8. What does Linear mean?

9. What does Exponential mean?