

Warm Up: 2/28

Write the next three terms in each sequence and explain how you generated them.

1. $-13, -8, -3, 2, 7, \dots$

2. $-2, 4, -8, 16, \dots$

3. $1, 5, 17, 53, 161, 485, \dots$

February 28th

Agenda:

- Warm Up
- Sequence Sorting
- Arithmetic Sequence
- Geometric Sequence
- Sequences
- Whiteboard Practice
- Exit Slip

Essential Question:

What is the difference between arithmetic and geometric sequences?

What do you call something lying at the bottom of the ocean and twitching?



Sequence Sorting:

1. Open your workbooks to pg. 225

Instructions:

1. Write the next 3 terms in each sequence (A – P)
2. Describe the pattern.
 - “multiply by $\frac{1}{2}$ ” OR “add -3”

Sequence Sorting:

1. Cut out graphs A through P.
2. Sort them into two groups.
 - Be prepared to explain your groupings.

Brain Break!

Arithmetic Sequence:

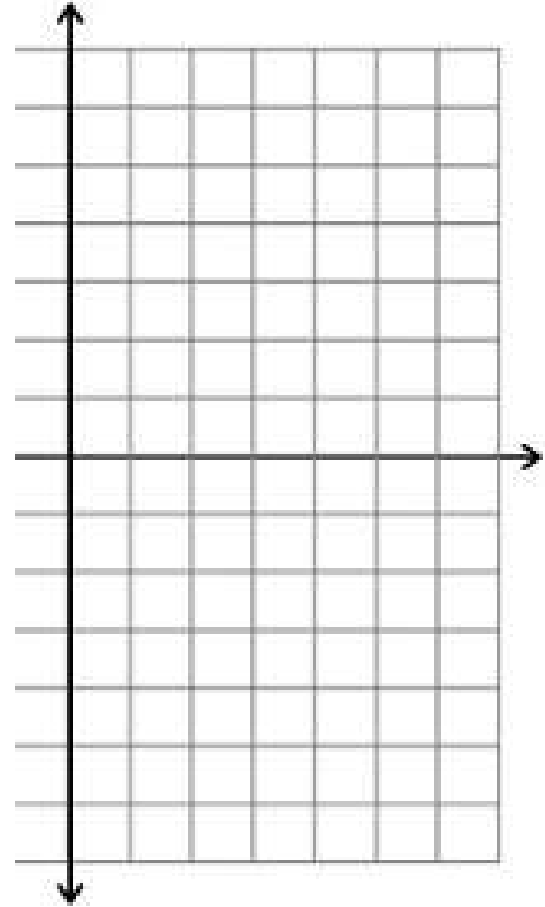
Common Difference: the positive or negative constant added to each term of a sequence.

- Paste the arithmetic sequences on this page (front and back)

Arithmetic Sequence:

Graph each sequence

• Ex: $-4, -1, 2, 5, 8, \dots$



Brain Break!

Geometric Sequence:

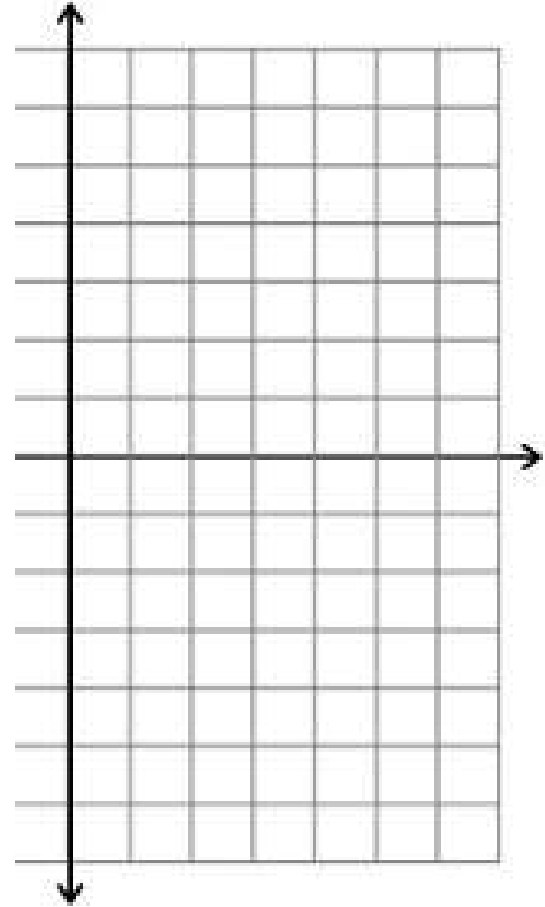
Common Ratio: the positive or negative constant multiplied to each term of a sequence.

- Paste the geometric sequences on this page (front and back)

Geometric Sequence:

Graph each sequence

• Ex: 6, 3, 1.5, 0.75, ...



Brain Break!

Whiteboard Practice:

You need:

- Whiteboard marker
- Whiteboard eraser
- Your desk

Whiteboard Practice:

Write the first 5 terms of the sequence:

1. The first term is 2, and the common difference is 3.
2. The first term is -3, and the common ratio is 2.
3. The first term is 11, and the common difference is -8.
4. The first term is 16, and the common ratio is $\frac{1}{2}$.

Homework:

Pg. 342

Problems: (42-50 even)

Exit Pass:

Write the first five terms in the sequence and determine whether the sequences is arithmetic or geometric.

1. The first term of the sequence is 8, and the common difference is 12.
2. The first term of the sequences is -9, and the common ratio is -2.
3. The first term of the sequences is 0, and the common difference is -6.