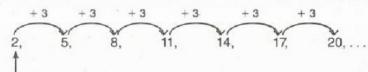
Learning Target: I can generate a number pattern and describe features of the pattern.

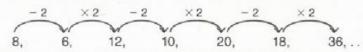
A pattern is an ordered set of numbers or objects, called terms. The numbers below form a pattern. The first term in the pattern is 2.



## First term

A rule is used to describe a pattern. The rule for this pattern is <u>add 3.</u> You can describe other patterns in the numbers. Notice that the terms in the pattern shown alternate between even and odd numbers.

For some patterns, the rule may have two operations.



The rule for this pattern is <u>subtract 2, multiply by 2.</u> The first term is 8. Notice that all of the terms in this pattern are even numbers.

## **Guided Practice**

- 1. Rule: Add 7
  First term: 12 \_\_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_,
- 2. Rule: Subtract 5
  First term 50 , , , , , ,
- Rule: Multiply by 3, subtract 1
   First term: 2
- 4. Rule: Multiply by 2, add 1
  First term: 4 \_\_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_,
- 5. There are 4 beans in the jar. Each day 3 beans are added. How many beans are in the jar for each of the first 5 days?
- 6. Brian is saving his allowance so he can buy a new bicycle that costs \$54. He gets \$7 a week in allowance. How many weeks will Brian need to save to buy his bicycle?

Indep	endent Practice: Now it is your turn	n to show w	hat you le	earned!	
1.	Rule: Add 8 First Term: 5			_,, _	
2.	Rule: Subtract 7 First Term 95	,	,	_,, _	
3.	Rule: Add15, Subtract 10 First term: 4		,	_,,	
4.	Rule: Add 1, Multiply by 2 First term: 2		,	_,, _	
	An artist is arranging tiles in rows nan the row below it. If the first row th row?				
6. There are 3 marbles in the jar. Each day 12 marbles are added. How many marbles are in the jar on the eighth day?					
hours	John mowed the lawn for perse he worked 1 hour and ear and earned \$26. At the last and 5 hours! How much money	rned \$13! house h	The nex	xt house h	ne worked 2 ard and