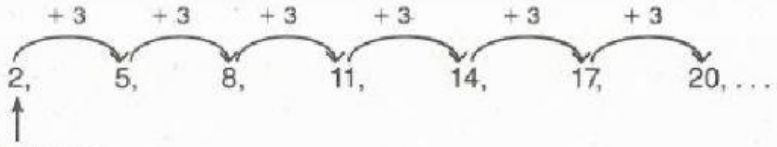
Learning Target: I can generate a number pattern and describe features of the pattern.

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.

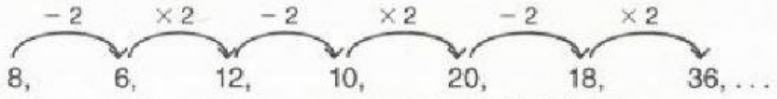


First term

A rule is used to describe a pattern. The rule for this pattern is *add 3.*

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 *subtract 2, multiply by 2.* 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 _____, _____, _____, _____, _____

3. 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?

Independent Practice: Now it is your turn to show what you learned!

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 _____, _____, _____, _____, _____

5. An artist is arranging tiles in rows to decorate a wall. Each new row has 2 fewer tiles than the row below it. If the first row has 23 tiles, how many tiles will be in the seventh 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?

7. John mowed the lawn for people in his neighborhood. At the first house he worked 1 hour and earned $13! The next house he worked 2 hours and earned $26. At the last house he worked really hard and worked 5 hours! How much money did he earn at the last house?