

Module 11

Lesson 2

I will be able to write a linear equation from a function table!

Arithmetic Sequence

Found by adding ^{or subtracting} the same number to the previous term.

1. $7, 14, 21, 28, \dots, 35, 42$

$14 - 7 = 7$
 $21 - 14 = 7$

2. $4.5, 4, 3.5, 3, \dots, 2.5, 2$

Geometric Sequence

Found by multiplying the previous term by the same number.

1. $2, 4, 8, 16, \dots, 32, 64$

$4 \div 2 = 2$
 $8 \div 4 = 2$

2. $1, 3, 9, 27, \dots, 81, 243$

\therefore

Write an equation based on a table:

Goal-How to get
from x to y

When there is no real-world situation, we USUALLY say
x is the independent variable and y is the dependent
variable!

Independent x	2	4	6	8	10
Dependent y	5	7	9	11	13

$x + 3 = y$

- ①
- ②
- ③ If same
add or
subtract

Practice:

x	12	11	10
y	10	9	8

$x - 2 = y$

x	5	4	3
y	10	9	8

$x + 5 = y$

x	10	12	14
y	25	30	35

x	0	1	12
y	0	2	24

Practice:

When Ryan is 10, his brother Kyle is 15. When Ryan is 16, Kyle will be 21. When Ryan is 21, Kyle will be 26. Create a function table, AND write and solve an equation to find Kyle's age when Ryan is 52.

Ryan			
Kyle			

Practice:

Meredith is playing a video game. She earns the same number of points for each alien she captures. She earned 750 points for capturing 5 aliens and 1350 points for capturing 9 aliens. Create a function table, AND write and solve an equation to find how many points Meredith will earn if she captures 27 aliens.

Aliens			
Points			

Practice:

Jamie bought 2 puzzles for \$5.00 and 3 puzzles for \$7.50. Create a function table AND write and solve an equation to find the cost of 15 puzzles.

Number of Puzzles			
Cost			