# Lesson 10: Interpret Relationships

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.OA.B.3 |
| Building Towards | 5.OA.B.3 |

### Teacher-facing Learning Goals

* Given rules, generate two numerical patterns. Identify and explain more complex relationships between corresponding terms.

### Student-facing Learning Goals

* Let’s find relationships between patterns.

### Lesson Purpose

The purpose of this lesson is for students to generate patterns based on two given rules and then identify and explain more complex relationships.

In this lesson students continue to generate two patterns and observe relationships between their corresponding terms. Most of the relationships are more complex in this lesson, involving either multiplication by a fractional amount or both multiplication and addition or subtraction. Students begin to express the relationships between patterns using equations (MP2).

### Access for:

### Students with Disabilities

* Representation (Activity 2)

### Instructional Routines

MLR7 Compare and Connect (Activity 1), True or False (Warm-up)

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

How effective were your questions in supporting students’ thinking today? What did students say or do that showed they were effective?

## Cool-down

(to be completed at the end of the lesson) 5min

Jada’s and Priya’s Patterns

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.OA.B.3 |

### Student-facing Task Statement

1. Jada and Priya are creating rules for patterns. Follow each rule to complete the patterns.

* Jada’s rule: start with 0 and add 3.
* 
* Priya’s rule: start with 0 and add 4.
* 

1. Kiran says that when Jada’s number is 45, Priya’s corresponding number will be 90. Do you agree? Why or why not?

### Student Responses

1. 0, 3, 6, 9, 12, 15, 18, 21, 24, 27

* 0, 4, 8, 12, 16, 20, 24, 28, 32, 36

1. No. Sample response: I don’t agree because 90 is not a multiple of 4 so it's not on Priya's list.