# Lesson 11: Rectangles with the Same Perimeter

### Standards Alignments

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| --- | --- |
| Addressing | 3.MD.D.8, 3.OA.C.7 |

### Teacher-facing Learning Goals

* Draw rectangles with the same perimeter and different areas.

### Student-facing Learning Goals

* Let’s explore rectangles with the same perimeter.

### Lesson Purpose

The purpose of this lesson is for students to understand that rectangles with the same perimeter do not always have the same area.

In previous lessons, students learned to find the area and perimeter of rectangles. In this lesson, students draw rectangles with a specified perimeter, find their areas, and notice that rectangles with the same perimeter do not always have the same area. Students then draw rectangles with specific perimeter that have different areas.

### Access for:

### Students with Disabilities

* Engagement (Activity 2)

### English Learners

* MLR8 (Activity 1)

### Instructional Routines

Number Talk (Warm-up)

### Materials to Gather

* Scissors: Activity 2
* Tape: Activity 2

### Materials to Copy

* Square Dot Paper Standard (groups of 1): Activity 2

### Lesson Timeline

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

### Teacher Reflection Question

Who has been sharing their ideas in class lately? Make a note of students whose ideas have not been featured in class and look for an opportunity for them to share their thinking in tomorrow’s lesson.

## Cool-down

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

Perimeter of 18

### Standards Alignments

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| --- | --- |
| Addressing | 3.MD.D.8 |

### Student-facing Task Statement

Draw two rectangles that each have a perimeter of 18 units, but different areas. Explain or show your reasoning.



### Student Responses

Sample response: Students draw rectangles that are 1 by 8 (area: 8 square units), 2 by 7 (area: 14 square units), 3 by 6 (area: 18 square units), or 4 by 5 (20 square units), and explain how the perimeter is the same, but the area is different.