Cultural Mapping (Part 5)

- In groups of 4, you will complete your reflection and distance calculations.
- Read all directions on the preceding pages.



Reflections

Requirements:

In your group, you will complete your reflection calculations.

1. Find the four landmarks in your cultural mapping system that reflect each other.
2. Complete the reflection questions on the sheet provided.
    a. Show the original coordinates, reflected coordinates, original quadrant, and reflected quadrant.
3. Each partner will have to calculate their own question.
    a. Decide as a group who will calculate which reflection question.



X-Axis Reflections

Quadrants must be written in roman numerals.

LANDMARK #1: _____

Original Coordinates: (,) Original Quadrant: _____

Reflected Coordinates: (,) Reflected Quadrant: _____

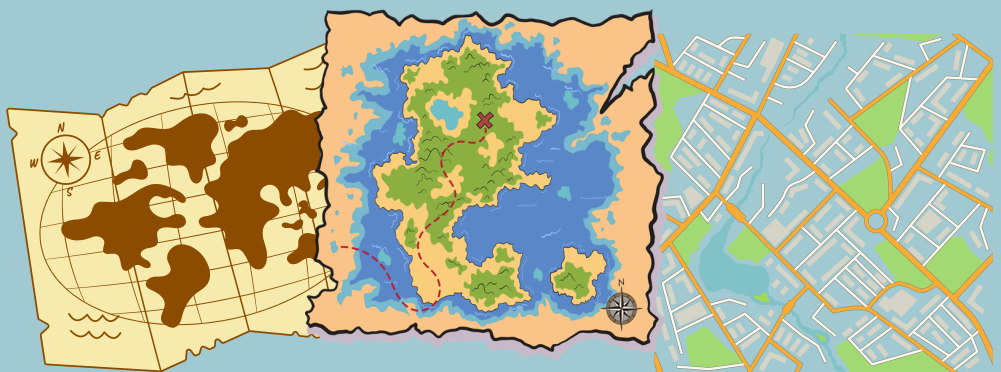
Mathematician: _____

LANDMARK #2: _____

Original Coordinates: (,) Original Quadrant: _____

Reflected Coordinates: (,) Reflected Quadrant: _____

Mathematician: _____



Y-Axis Reflections

Quadrants must be written in roman numerals.

LANDMARK #3: _____

Original Coordinates: (,) Original Quadrant: _____

Reflected Coordinates: (,) Reflected Quadrant: _____

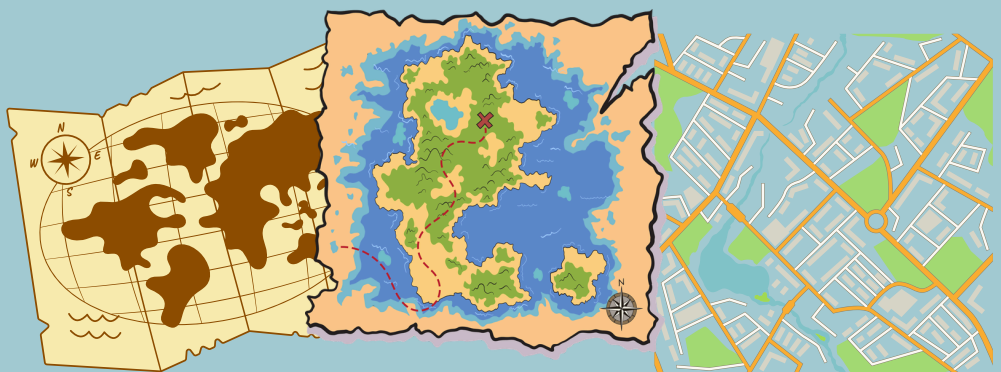
Mathematician: _____

LANDMARK #4: _____

Original Coordinates: (,) Original Quadrant: _____

Reflected Coordinates: (,) Reflected Quadrant: _____

Mathematician: _____



Distance Calculations Example

Quadrants must be written in roman numerals.

Pick two landmarks in the same quadrant (I, II, III, or IV) that share the same y-coordinate.

Quadrant: **III**

Landmark: **Lake Oku** & Landmark: **Melanie's Palace**

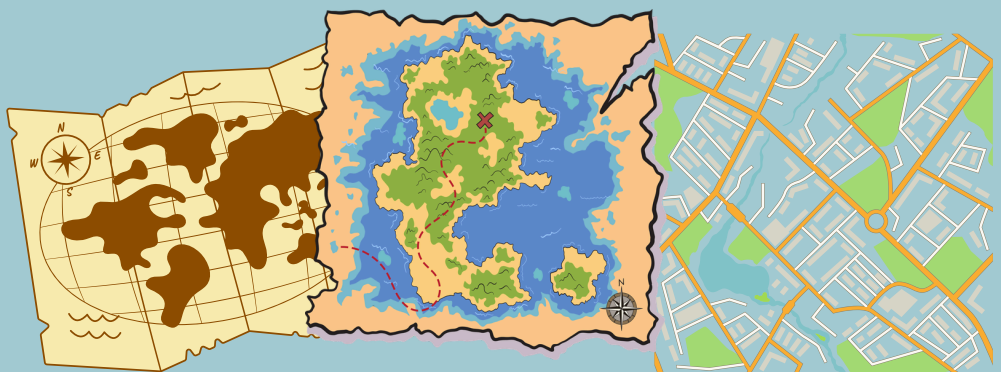
Coordinate: **(-5, -7)** & Coordinate: **(-2, -7)**

$$\text{Distance} = |x_2 - x_1|$$

Calculation

| -2 - (-5) |
| -2 + 5 |
| 3 |
= 3

Mathematician: _____



Distance Calculations (Same Quadrant)

Quadrants must be written in roman numerals.

Pick two landmarks in quadrant I that share the same x-coordinate.

Quadrant: ____

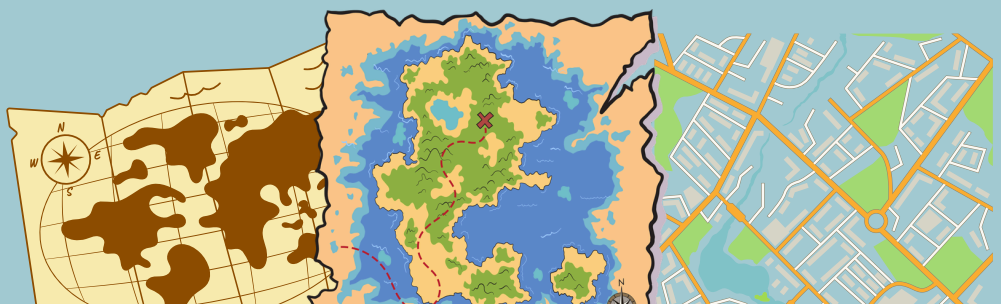
Landmark: _____ & Landmark: _____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |y_2 - y_1|$$

Calculation

Mathematician: _____



Distance Calculations (Same Quadrant)

Quadrants must be written in roman numerals.

Pick two landmarks in quadrant II that share the same x-coordinate.

Quadrant: ____

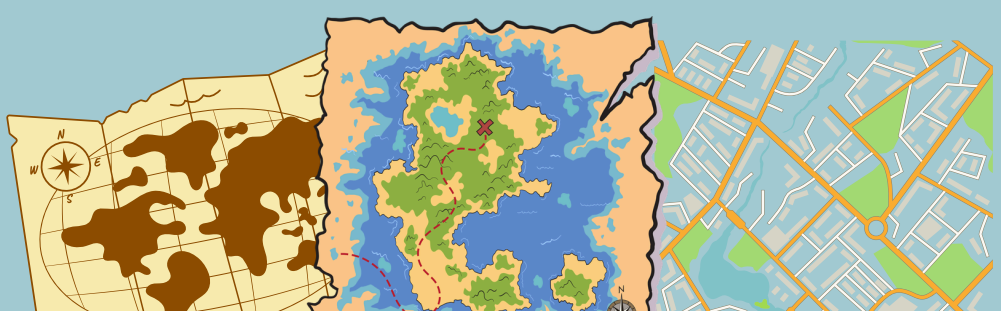
Landmark: _____ & Landmark: _____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |y_2 - y_1|$$

Calculation

Mathematician: _____



Distance Calculations (Same Quadrant)

Quadrants must be written in roman numerals.

Pick two landmarks in quadrant III that share the same y-coordinate.

Quadrant: ____

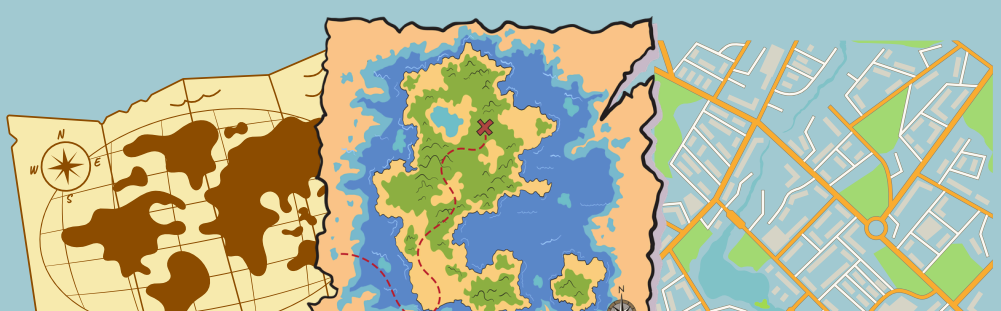
Landmark: _____ & Landmark: _____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |x_2 - x_1|$$

Calculation

Mathematician: _____



Distance Calculations (Same Quadrant)

Quadrants must be written in roman numerals.

Pick two landmarks in quadrant IV that share the same y-coordinate.

Quadrant: ____

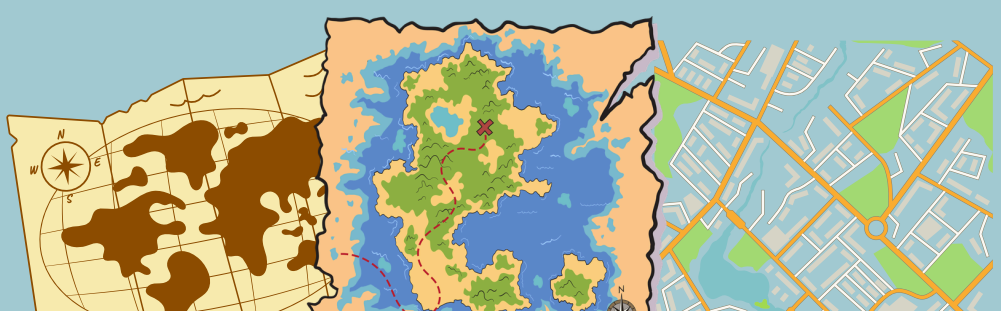
Landmark: _____ & Landmark: _____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |x_2 - x_1|$$

Calculation

Mathematician: _____



Distance Calculations (Different Quadrants)

Quadrants must be written in roman numerals.

Pick two landmarks in different quadrants that share the same x-coordinate.

Landmark: _____ & Landmark _____

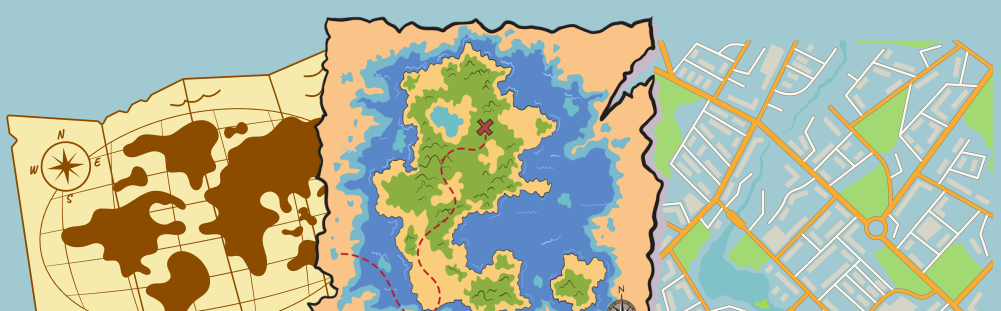
Quadrant: ____ & Quadrant: ____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |y_2 - y_1|$$

Calculation

Mathematician: _____



Distance Calculations (Different Quadrants)

Quadrants must be written in roman numerals.

Pick two landmarks in different quadrants that share the same x-coordinate.

Landmark: _____ & Landmark _____

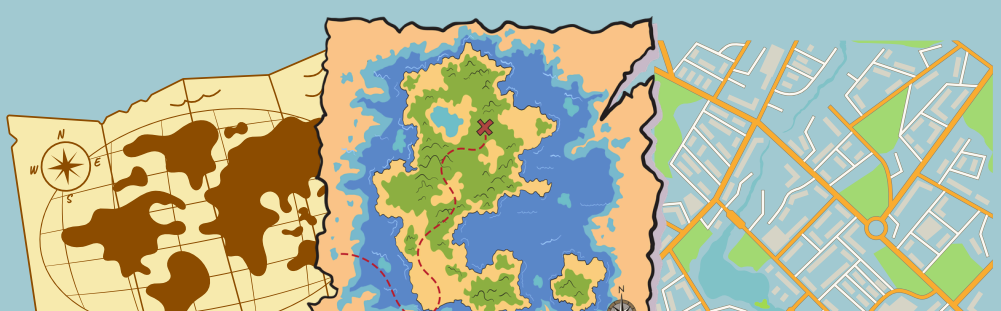
Quadrant: ____ & Quadrant: ____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |y_2 - y_1|$$

Calculation

Mathematician: _____



Distance Calculations (Different Quadrants)

Quadrants must be written in roman numerals.

Pick two landmarks in different quadrants that share the same y-coordinate.

Landmark: _____ & Landmark _____

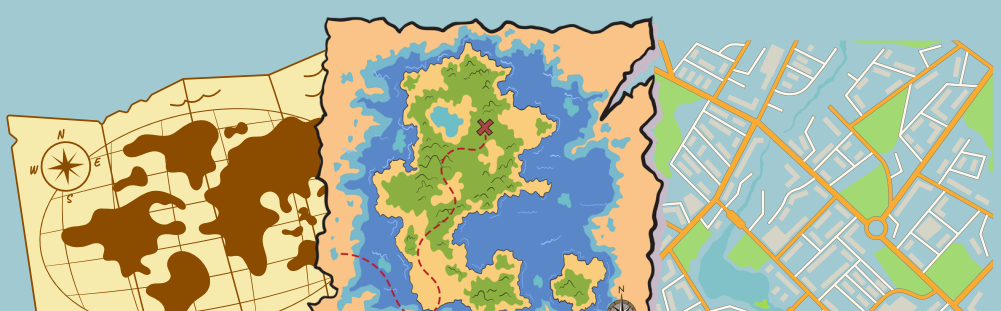
Quadrant: ____ & Quadrant: ____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |x_2 - x_1|$$

Calculation

Mathematician: _____



Distance Calculations (Different Quadrants)

Quadrants must be written in roman numerals.

Pick two landmarks in different quadrants that share the same y-coordinate.

Landmark: _____ & Landmark _____

Quadrant: ____ & Quadrant: ____

Coordinate: (,) & Coordinate: (,)

$$\text{Distance} = |x_2 - x_1|$$

Calculation

Mathematician: _____

