# Lab 3.4 - If My Calculations Are Correct

In this lab, you will write custom reporter and predicate blocks to perform several useful calculations and computations.

## Simple Computations

1. Write a custom Snap! reporter block called min that determines which of two numbers is smaller and reports that value. If the two numbers are equal, report either one.
2. Write a custom Snap! reporter block called max that determines which of two numbers is larger and reports that value. If the two numbers are equal, report either one.
3. Write a custom Snap! predicate block called between that determines if a number is between two other numbers. If the first number is equal to either of the other two numbers or is between them, the block should report “true”.
4. Write a custom Snap! predicate called at least as long as that determines whether a word has at least a specified number of letters.

## Bonus: Stepping Things Up

Write a custom Snap! reporter block called distance to that computes and reports the distance from a sprite’s position to another point. Use the x position and y position blocks to determine the sprite’s position. Remember that the formula for the distance between points (x1, y1) and (x2, y2) is sqrt((y2-y1)^2+(x2-x1)^2).

## Grading Scheme/Rubric

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| **Lab 3.4 Criteria** | **Points** |
| 1.1 min | 0.5 |
| 1.2 max | 0.5 |
| 1.3 between | 0.5 |
| 1.4 at least as long as | 0.5 |
| Bonus | 0.5 |
| **PROJECT TOTAL** | **2.0 points** |