# The Distance Between (0, 2) and (4, 5)

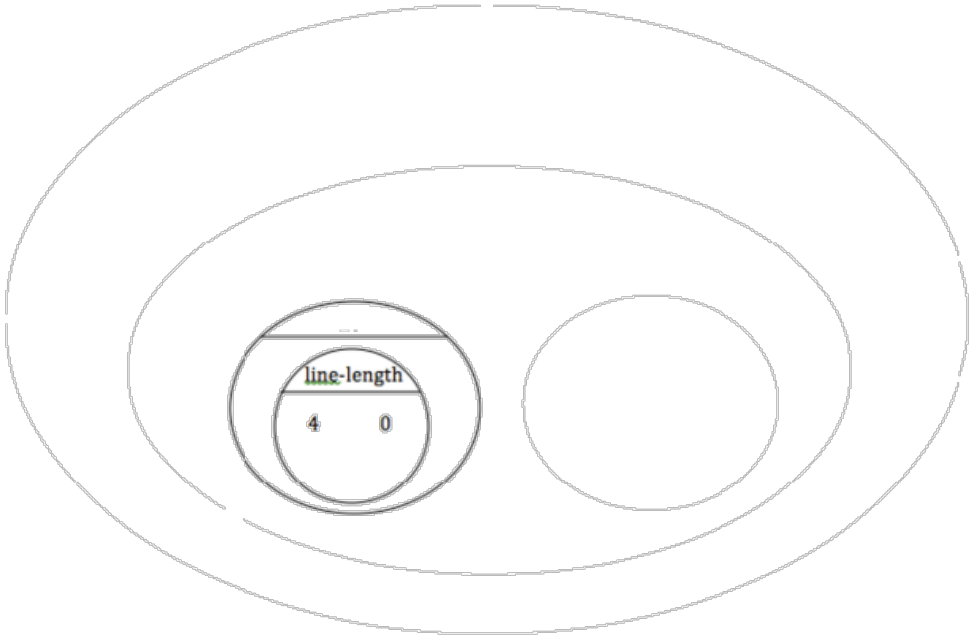
The distance between $x_1$ and $x_2$ is computed by `line-length(x1, x2)` . The distance between $y_1$ and $y_2$ is computed by `line-length(y1, y2)` . Below is the equation to compute the hypotenuse of a right triangle with those amount for legs:

$$\sqrt{line\text{-}length(x_1, x_2)^2 + line\text{-}length(y_1, y_2)^2}$$

Suppose your player is at **(0, 2)** and a character is at **(4, 5)** . What is the distance between them? With your pencil, label which numbers represent $x_1$, $y_1$, $x_2$ and $x_y$. The equation to compute the distance between these points is:

$$\sqrt{line\text{-}length(0, 4)^2 + line\text{-}length(2, 5)^2}$$

**1. Translate the expression above, for (0,2) and (4,5) into a Circle of Evaluation below .**




**2. Convert the Circle of Evaluation to Code below .**

```
num-sqrt(num-sqr(line-length(x1, x2)) + line-length(x1, x2))
```