Word Problem: is-collision

Directions: *Write a function "is-collision", which takes FOUR inputs:*

- *px: The x-coordinate of the player*
- *py: The y-coordinate of the player*
- *cx: the x-coordinate of another game character*
- *cy: the y-coordinate of another game character*

Are the coordinates of the player within 50 pixels of the coordinates of the other character?

Contract and Purpose Statement ☐

Every contract has three parts...

is-collision :: Number, Number, Number, Number -> Boolean

function name   *domain*   *range*

Is the Player (px, py) within 50 pixels of another Character (cx, cy)?

what does the function do?

Examples ☐

Write some examples, then circle and label what changes...

examples:

is-collision (25, 75, 30, 270) is

function name   *input(s)*

distance(25, 75, 30, 270) < 50

what the function produces

is-collision (25, 75, 100, 75) is

function name   *input(s)*

distance(25, 75, 100, 75) < 50

what the function produces

end

Definition ☐

Write the definition, given variable names to all your input values...

fun is-collision (px, py, cx, cy):

function name   *variables*

distance(px, py, cx, cy) < 50

what the function does with those variables

end