Word Problem: collide?

Directions: Use the Design Recipe to write a function `collide?`, which takes in the coordinates of two objects and checks if they are close enough to collide.

Contract and Purpose Statement

Every contract has three parts...

;`collide?` :   `Number Number Number Number`   `->`   `Boolean`
    function name   *domain*   *range*

; Takes in two pairs of x/y coordinates and uses the distance between them to check for collision
                                    what does the function do?

Examples

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

`(EXAMPLE (collide?`   `0 0 3 4`   `)` `(< (distance 0 0 3 4) 50)`   `)`
          function name   *input(s)*   *what the function produces*

`(EXAMPLE (collide?`   `25 50 250 480 )` `(< (distance 25 50 250 480) 50)`   `)`
          function name   *input(s)*   *what the function produces*

Definition

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

`(define (collide?`   `x1 y1 x2 y2)`
        function name   *variable(s)*

   `(< (distance x1 y1 x2 y2) 50)`   `)`
                     what the function does with those variable(s)