

## Check for Mistakes in this Word Problem: long-name?

**Directions:** Names that are longer than 20 characters are considered long names. Write a function that takes in a person's name and returns true if it is a long name and false if it is not.

### Contract and Purpose Statement

Every contract has three parts...

|   |               |   |        |   |         |
|---|---------------|---|--------|---|---------|
| ; | long-name?    | : | string | → | boolean |
|   | <hr/>         |   | <hr/>  |   | <hr/>   |
|   | function name |   | domain |   | range   |

  

|   |  |
|---|--|
| ; | Check if a name is longer than 20 characters |
|   | <hr/>  |
|   | what does the function do?                   |

### Examples

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

|            |               |                                      |
|------------|---------------|--------------------------------------|
| (EXAMPLE ( | long-name?    | "John Joseph Jingleheimer Schmidt" ) |
|            | <hr/>         | <hr/>                                |
|            | function name | input(s)                             |

  

|   |   |   |     |   |
|---|---|---|-----|---|
| ( | > | (string=? "John Joseph Jingleheimer Schmidt") | 10) | ) |
|   |   | <hr/>   |     |   |
|   |   | what the function produces                    |     |   |

  

|            |               |               |   |   |                            |     |   |
|------------|---------------|---------------|---|---|----------------------------|-----|---|
| (EXAMPLE ( | long-name?    | "Joe Jones" ) | ( | > | (string=? "Joe Jones")     | 10) | ) |
|            | <hr/>         | <hr/>         |   |   | <hr/>                      |     |   |
|            | function name | input(s)      |   |   | what the function produces |     |   |

### Definition

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

|           |               |           |   |
|-----------|---------------|-----------|---|
| (define ( | long?         | name      | ) |
|           | <hr/>         | <hr/>     |   |
|           | function name | variables |   |

  

|   |   |   |     |   |
|---|---|---|-----|---|
| ( | < | name  | 20) | ) |
|   |   | <hr/>                                       |     |   |
|   |   | what the function does with those variables |     |   |