

## Check for Mistakes in this Word Problem: enough-cash?

**Directions:** You go the store with \$1.50 in your pocket. Write a function which takes in the price of an item and returns true if you have enough money to buy the item and false if you do not.

### Contract and Purpose Statement

Every contract has three parts ...

|                             |                |                     |                |                      |
|-----------------------------|----------------|---------------------|----------------|----------------------|
| <code>; enough-cash?</code> | <code>:</code> | <code>string</code> | <code>→</code> | <code>boolean</code> |
| <hr/>                       |                | <hr/>               |                | <hr/>                |
| <i>function name</i>        |                | <i>domain</i>       |                | <i>range</i>         |

  

|  |
|--|
| <code>; Check to see if the item costs less than 1.50</code> |
| <hr/>  |
| <i>what does the function do?</i>                            |

### Examples

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

|                        |                           |                    |                |                                   |                |
|------------------------|---------------------------|--------------------|----------------|-----------------------------------|----------------|
| <code>(EXAMPLE(</code> | <code>enough-cash?</code> | <code>"gum"</code> | <code>)</code> | <code>(&lt; gum 1.5)</code>       | <code>)</code> |
| <hr/>                  | <hr/>                     | <hr/>              |                | <hr/>                             | <hr/>          |
|                        | <i>function name</i>      | <i>input(s)</i>    |                | <i>what the function produces</i> |                |

  

|                        |                           |                     |                |                                   |                |
|------------------------|---------------------------|---------------------|----------------|-----------------------------------|----------------|
| <code>(EXAMPLE(</code> | <code>enough-cash?</code> | <code>"soda"</code> | <code>)</code> | <code>(&lt; gum 150)</code>       | <code>)</code> |
| <hr/>                  | <hr/>                     | <hr/>               |                | <hr/>                             | <hr/>          |
|                        | <i>function name</i>      | <i>input(s)</i>     |                | <i>what the function produces</i> |                |

### Definition

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

|                       |                           |                   |                |
|-----------------------|---------------------------|-------------------|----------------|
| <code>(define(</code> | <code>enough-cash?</code> | <code>item</code> | <code>)</code> |
| <hr/>                 | <hr/>                     | <hr/>             |                |
|                       | <i>function name</i>      | <i>variables</i>  |                |

  

|  |                |
|--|----------------|
| <code>(&lt; item 1.5)</code>                       | <code>)</code> |
| <hr/>  | <hr/>          |
| <i>what the function does with those variables</i> |                |