

Check for Mistakes in this Word Problem: enough-carpet?

Directions: You have 100 square feet of carpet to put down in your room. Write a function that takes in the length and width of your room and returns true if you have enough carpet and false if you don't.

Contract and Purpose Statement □

Every contract has three parts...

| functionname | domain | range |
|---|----------------------------|-----------------------|
| <pre> ; enough-carpet? : </pre> | <pre> number number </pre> | <pre> → number </pre> |
| <pre> ; Given length and width of a room, is the area less than 100 sq feet? </pre> | | |
| <p>what does the function do?</p> | | |

Examples □

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

| | | | | | | | | |
|-----------|----------------------|------------------|---|----|----|--------|-----------------------------------|---|
| (EXAMPLE) | enough-carpet? | (10 15) |) | (< | (* | 10 15) | 100) |) |
| | <i>function name</i> | <i>input [s]</i> | | | | | <i>what the function produces</i> | |
| (EXAMPLE) | enough-carpet? | (9 10) |) | (< | (* | 9 10) | 100) |) |
| | <i>function name</i> | <i>input [s]</i> | | | | | <i>what the function produces</i> | |

Definition □

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

```
(define (enough-carpet? length width)
  (< (* length width) 100))
```

what the function does with those variables