

Check for Mistakes in this Word Problem: target-leap

Directions: Write a function which takes in the target's x-coordinate and makes a player leap by returning an x-coordinate that is double the original x-coordinate.

Contract and Purpose Statement

Every contract has three parts...

| | | | | | |
|---|----------------------|---|---------------|---|--------------|
| ; | target-leap | : | number | → | number |
| | <hr/> | | <hr/> | | <hr/> |
| | <i>function name</i> | | <i>domain</i> | | <i>range</i> |

| | | | | | |
|---|---|--|--|--|--|
| ; | Takes the x-coordinate and returns a new one, multiplied by 2 | | | | |
| | <hr/> | | | | |
| | <i>what does the function do?</i> | | | | |

Examples

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

| | | | | | |
|------------|----------------------|-----------------|---|-----------------------------------|---|
| (EXAMPLE (| target-leap | 100 |) | (200) |) |
| | <hr/> | <hr/> | | <hr/> | |
| | <i>function name</i> | <i>input(s)</i> | | <i>what the function produces</i> | |

| | | | | | |
|------------|----------------------|-----------------|---|-----------------------------------|---|
| (EXAMPLE (| target-leap | 40 |) | (200) |) |
| | <hr/> | <hr/> | | <hr/> | |
| | <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 (| leap | x-coor |) |
| | <hr/> | <hr/> | |
| | <i>function name</i> | <i>variables</i> | |

| | |
|--|---|
| (* x 5) |) |
| <hr/> | |
| <i>what the function does with those variables</i> | |