

Check for Mistakes in this Word Problem: state-tax

Directions: Some states have different tax rates. New York is 8%, Pennsylvania is 3%, and Delaware is 0%. All other states are 5%. Write a function that takes in the price of an item and returns how much the tax will be on the item.

Contract and Purpose Statement



Every contract has three parts...

;	state-tax	:	string	→	number
	<hr/>		<hr/>		<hr/>
	function name		domain		range

;

Given the state and an item's price,	returns the the tax on that item
<hr/>	
what does the function do?	

Examples



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

(EXAMPLE ((tax Delaware))	(+ 0.0 price))
<hr/>	<hr/>	<hr/>	<hr/>
function name	input(s)	what the function produces	

(EXAMPLE ((tax Georgia))	(+ 0.05 price))
<hr/>	<hr/>	<hr/>	<hr/>
function name	input(s)	what the function produces	

Definition



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

```
(define( state-tax state price )  
  (cond  
    [(string=? state "Pennsylvania") (* 0.03 price)]  
    [(string=? state "New York") (* 0.08 price)]  
    [(string=? state "Delaware") (* 0.0 price)]  
    [else: (* 0.05 price) ]))
```