

## 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 ...

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

  

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

### Examples

Write some examples of your function in action...

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

  

<code>(EXAMPLE (tax Georgia)</code>	<code>)</code>	<code>(+ 0.05 price)</code>	<code>)</code>
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<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...

```
(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)]))
```