

## 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  
function name domain range

; Given the state and an item's price, returns the the tax on that item  
what does the function do?

### Examples



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

(EXAMPLE( (tax Delaware) ) (+ 0.0 price) )  
function name input(s) what the function produces

(EXAMPLE( (tax Georgia) ) (+ 0.05 price) )  
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 )  
function name variables

(cond

[(string=? state "Pennsylvania") (\* 0.03 price)]

[(string=? state "New York") (\* 0.08 price)]

[(string=? state "Delaware") (\* 0.0 price)]

[else (\* 0.05 price)]))