# 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)         ]))