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 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, giving 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)   ]))