

## Word Problem: cost

**Directions:** Luigi's Pizza has hired you as a programmer. They offer Cheese (\$9.00), Pepperoni (\$10.50), Chicken (\$11.25) and Broccoli (\$10.25). Write a function called `cost` which takes in the name of a topping and outputs the price of a pizza with that topping.

### Contract and Purpose Statement

Every contract has three parts...

<code>;</code>	<code>cost</code>	<code>:</code>	<code>string</code>	<code>→</code>	<code>number</code>
	<small>function name</small>		<small>domain</small>		<small>range</small>

  

<code>;</code>	<code>Produce cost of a pizza with given topping</code>
	<small>what does the function do?</small>

### Examples

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

<code>(EXAMPLE (</code>	<code>cost</code>	<code>"cheese"</code>	<code>)</code>	<code>9</code>	<code>)</code>
	<small>function name</small>	<small>input(s)</small>		<small>what the function produces</small>	

  

<code>(EXAMPLE (</code>	<code>cost</code>	<code>"pepperoni"</code>	<code>)</code>	<code>10.5</code>	<code>)</code>
	<small>function name</small>	<small>input(s)</small>		<small>what the function produces</small>	

  

<code>(EXAMPLE (</code>	<code>cost</code>	<code>"chicken"</code>	<code>)</code>	<code>11.25</code>	<code>)</code>
	<small>function name</small>	<small>input(s)</small>		<small>what the function produces</small>	

  

<code>(EXAMPLE (</code>	<code>cost</code>	<code>"broccoli"</code>	<code>)</code>	<code>10.25</code>	<code>)</code>
	<small>function name</small>	<small>input(s)</small>		<small>what the function produces</small>	

### Definition

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

```
(define(cost topping)  
  function name      variables  
  
  (cond  
    [(string=? "cheese" topping)  
      9]  
    [(string=? "pepperoni" topping)  
      10.5]  
    [(string=? "chicken" topping)  
      11.25]  
    [(string=? "broccoli" topping)  
      10.25]  
    [else  
      1000000]  
  ]))
```