

Word Problem: red-shape

Directions: Write a function called "red-shape", which takes in the name of a shape and draws that shape (solid and red). Add an otherwise clause that produces a sensible output.

Contract and Purpose Statement

Every contract has three parts...

<u>red-shape</u>	::	<u>String</u>	->	<u>Image</u>
<small>function name</small>		<small>domain</small>		<small>range</small>

Create a solid red shape of the given kind

what does the function do?

Examples

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

examples:

<u>red-shape</u>	(	<u>"circle"</u>	) is	<u>circle(50, "solid", "red")</u>
<small>function name</small>		<small>input(s)</small>		<small>what the function produces</small>
<u>red-shape</u>	(	<u>"triangle"</u>	) is	<u>triangle(50, "solid", "red")</u>
<small>function name</small>		<small>input(s)</small>		<small>what the function produces</small>
<u>red-shape</u>	(	<u>"rectangle"</u>	) is	<u>rectangle(5, 1, "solid", "red")</u>
<small>function name</small>		<small>input(s)</small>		<small>what the function produces</small>
<u>red-shape</u>	(	<u>"star"</u>	) is	<u>star(50, "solid", "red")</u>
<small>function name</small>		<small>input(s)</small>		<small>what the function produces</small>
<u>red-shape</u>	(	<u>"garbanzo"</u>	) is	<u>text("???", 20, "red")</u>
<small>function name</small>		<small>input(s)</small>		<small>what the function produces</small>

end

Definition

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

```
fun red-shape (shape):  
  function name      variables  
  if "circle" == shape : circle(50, "solid", "red")  
  else if "triangle" == shape : triangle(50, "solid", "red")  
  else if "rectangle" == shape : rectangle(9, "solid", "red")  
  else if "star" == shape : star(50, "solid", "red")  
  else: text(20, "???", "red")  
  end  
end
```