

# 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>
<i>function name</i>		<i>domain</i>		<i>range</i>

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

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
```