COMP303 Midterm Review Question 1

```
<html>
   <head>
       <title>Example Project Development - Click Game</title>
       <script language="javascript" type="text/javascript">
       <!--
       var count=0;

       function expand_layer() {
           var the_layer = document.getElementById("rectangle_area");
           var y_increment = Math.floor(Math.random() * 50);

           the_layer.style.height = parseInt(the_layer.style.height)
                                                    + y_increment;

           count = count + 1;

           if (count < 10)
               the_timer = setTimeout("expand_layer()", 500);
       }

       -->
       </script>
   </head>

   <body onload="expand_layer()">

       <div id="rectangle_area"
         style="position:absolute;background-color:grey;
                    left:100;top:100;width:800;height:100">
       </div>

   </body>
</html>
```

Question: What is the **maximum possible** height of the layer after the above JavaScript has completely finished executing?

Answer: _____590_____

The height of *rectangle_area* is 100 and the range of *y_increment* is 0 – 49. Since *expand_layer()* will be called 10 times, the **maximum possible** height of the layer after execution is 100 + 49 * 10 = 590.

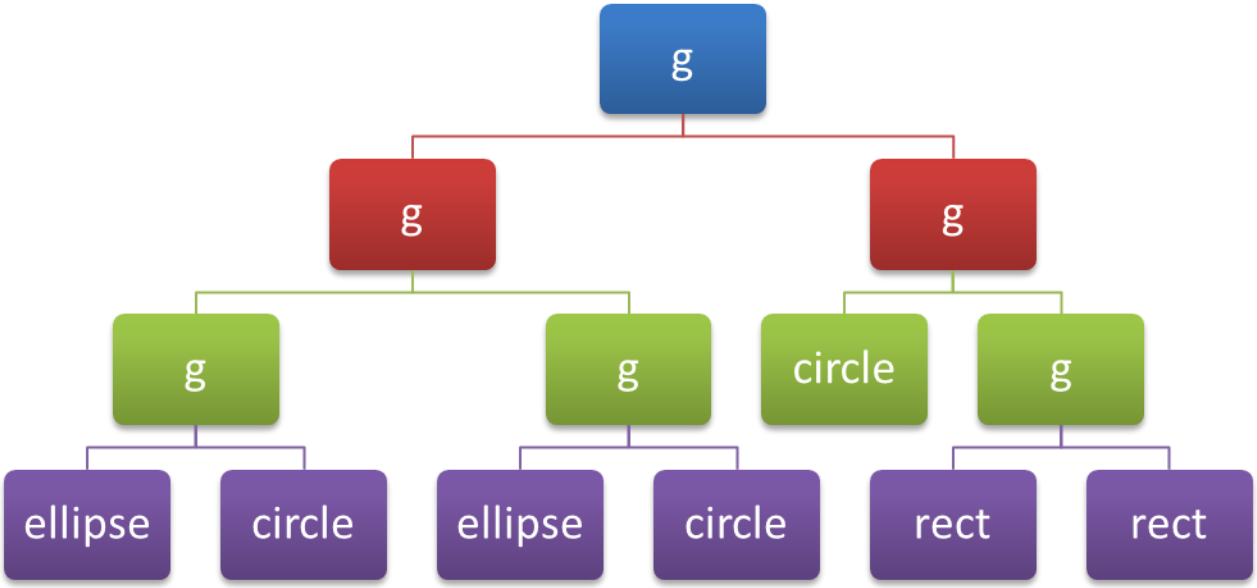
COMP303 Midterm Review Question 2

Here is some SVG code.

```
<g id="top">
   <g>
      <g>
         <ellipse cx="506" cy="348" rx="14" ry="13"
           style="fill:rgb(255,255,255);stroke:rgb(0,0,0);
                 stroke-width:3"/>
         <circle cx="512" cy="352.5" r="4" style="fill:rgb(0,0,0)"/>
      </g>
      <g>
         <ellipse cx="320" cy="240" rx="14" ry="13"
           transform="translate(263,107)"
           style="fill:rgb(255,255,255);
               stroke:rgb(0,0,0);stroke-width:3"/>
         <circle cx="577" cy="351.5" r="4" style="fill:rgb(0,0,0)"/>
      </g>
   </g>
   <g>
      <circle cx="559" cy="427.5" r="40"
         transform="translate(-14,-10)"
         style="fill:rgb(128,0,0);stroke:rgb(255,64,64);
               stroke-width:5"/>
      <g>
         <rect x="532" y="382" width="11" height="29"
            transform="translate(1,0)"
            style="fill:rgb(255,255,255);stroke:rgb(0,0,0);
                  stroke-width:1"/>
         <rect x="315" y="226" width="11" height="29"
            transform="translate(231,156)"
            style="fill:rgb(255,255,255);stroke:rgb(0,0,0);
                  stroke-width:1"/>
      </g>
   </g>
</g>
```

Draw the DOM of the above code. For each node, make sure you include the *nodeName* attribute (such as *circle*, *rect*, and so on). You don't have to write the other attributes of the nodes. Where appropriate, put the first node on the left side rather than the right side.

a) Draw the DOM in the space below.



b) Write a single line of JavaScript code to delete the first circle.

Answer:
document.getElementsByTagName("circle")[0].parentNode.removeChild(document.getElementsBy TagName("circle")[0]);