1. True or False:

(a) T You can validate CSS files, in the same way you validate HTML and XHTML files.
(b) T CSS uses a box model to control how elements are displayed.
(c) T % and em specify relative font sizes.
(d) T If you mix 100% red, 100% green, and 100% blue you will get white.
(e) F In strict HTML, you can nest block elements inside block elements.
(f) F Pseudoclasses must be defined in your HTML file to be used.
(g) T The span element is used to style in-line elements.
(h) F The div element is used to style in-line elements.
(i) F Tables are defined in columns, using the <tc> element.
(j) F For a table, you can add background color to the whole table, but not an individual entry or cell.

2. Answer in two sentences or less the following:

(a) What does the border-collapse property do? Give an example.
   The border-collapse property controls if there is spacing between cell borders in a table. For example, if it is set to collapse, then there’s a single border between entries, instead of a double border.

(b) What does the margin property do? How does it differ from the border-collapse property?
   The margin property controls spacing around elements in general. For tables, setting the table entry (td) margin to 0 is the same as the collapse value for border-collapse. They differ in that margins can be set to any width, while border-collapse just controls whether the borders are collapsed to one or not.
3. For each of the following, identify whether it would be done in HTML or CSS:

(a) **CSS** specify the width of an element
(b) **HTML** include an image
(c) **HTML** organize a list of entries
(d) **CSS** change the text alignment of a paragraph
(e) **CSS** change text height

4. Fill in the following table with the corresponding decimal or hexcode representation of the number. For partial credit, show your work.

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Hexcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>#A</td>
</tr>
<tr>
<td>16</td>
<td>#10</td>
</tr>
<tr>
<td>20</td>
<td>#14</td>
</tr>
<tr>
<td>173</td>
<td>#ad</td>
</tr>
<tr>
<td>255</td>
<td>#ff</td>
</tr>
</tbody>
</table>

20/16 = 1 remainder 4

#ad = 16·#a + #d = 16·10 + 13 = 160 + 13 = 173

#ff = 16·#f + #f = 16$\cdot$15 + 15 = 240 + 15 = 255

5. Change the following HTML file to be in XHTML. Circle all changes needed and write in the changes:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
<head>
<title>myPod</title>
<style type="text/css">
body { background-color: #eaf3da; }
</style>
</head>
<body>
<p><img src="logo/mypod.gif" alt="myPod Logo" /></p>
<h1>Welcome to myPod</h1>
<p>Welcome to the place to show off your iPod!</p>
<h2>Seattle, Washington</h2>
<p>Me and my iPod in Seattle! You can see rain clouds and the Space Needle.
```
6. Be the browser with the following HTML and CSS files. Draw the page and indicate any style (color, borders, etc) on your page:

Here's the page:
HTML:

```
<html xmlns="http://www.w3.org/1999/xhtml"
lang="en">
<head>
<title>Head First Lounge Elixirs</title>
<link type="text/css" rel="stylesheet"
href="../lounge.css" />
</head>
<body>
<h1>Our Elixirs</h1>
<h2>Green Tea Cooler</h2>
<p class="greentea">
This elixir combines the healthful benefits
of green tea with a twist of chamomile
blossoms and ginger root.
</p>
<h2>Raspberry Ice Concentration</h2>
<p class="raspberry">
Combining raspberry juice with lemon
grass, citrus peel and rosehips, this icy
drink will make your mind feel clear and
crisp.
</p>
<h2>Blueberry Bliss Elixir</h2>
<p class="blueberry">
Blueberries and cherry essence mixed
into a base of elderflower herb tea will put
you in a relaxed state of bliss in no time.
</p>
<h2>Cranberry Antioxidant Blast</h2>
<p>
Wake up to the flavors of cranberry and
hibiscus in this vitamin C rich elixir.
</p>
<p>
<a href="../lounge.html">Back to the
Lounge</a>
</p>
</body>
</html>
```

CSS:

```
body {
    font-family: sans-serif;
}

h1, h2 {
    color: gray;
}

h1 {
    border-bottom: 1px solid black;
}

p {
    color: maroon;
}

p.greentea {
    color: green;
}

p.raspberry {
    color: blue;
}

p.blueberry {
    color: purple;
}
```

7. Write a **complete** CSS style sheet that:

- uses a sans-serif font throughout the page,
- `<h1>` and `<h2>` headings have a bold serif font,
- paragraphs inside the div with id `options` have solid borders, and
- `<h1>` headings should have a gray dotted bottom border.

```
body {
    font-family: sans-serif;
}

h1, h2 {
```
8. Write the HTML code for the table with the following information:
(No need to write any CSS rules or style sheets).

*RAND New York Sales Tax Rates reports sales tax rates for some counties & cities.*

<table>
<thead>
<tr>
<th>Area</th>
<th>Rate</th>
<th>Area</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York State-- only</td>
<td>4.00</td>
<td>Albany</td>
<td>8.50</td>
</tr>
<tr>
<td>Allegany</td>
<td>8.50</td>
<td>*Bronx see New York City</td>
<td></td>
</tr>
<tr>
<td>*Brooklyn see New York City</td>
<td></td>
<td>Broome</td>
<td>8.00</td>
</tr>
<tr>
<td>*Nassau</td>
<td>0.62</td>
<td>*New York (Manhattan) see New York City</td>
<td></td>
</tr>
<tr>
<td>*New York City</td>
<td>8.38</td>
<td>Niagara</td>
<td>8.00</td>
</tr>
</tbody>
</table>

```html
<table>
  <caption>RAND New York Sales Tax Rates reports sales tax rates for some counties & cities.</caption>
  <tr>
    <th>Area</th>
    <th>Rate</th>
    <th>Area</th>
    <th>Rate</th>
  </tr>
  <tr>
    <td>New York State-- only</td>
    <td>4.00</td>
    <td>Albany</td>
    <td>8.50</td>
  </tr>
  <tr>
    <td>Allegany</td>
    <td>8.50</td>
    <td>*Bronx see New York City</td>
    <td></td>
  </tr>
  <tr>
    <td>*Brooklyn see New York City</td>
    <td></td>
    <td>Broome</td>
    <td>8.00</td>
  </tr>
  <tr>
    <td>*Nassau</td>
    <td>0.62</td>
    <td>*New York (Manhattan) see New York City</td>
    <td></td>
  </tr>
  <tr>
    <td>*New York City</td>
    <td>8.38</td>
    <td>Niagara</td>
    <td>8.00</td>
  </tr>
</table>
```
<td>Broome</td>
<td>8.00</td>
</tr>
<tr>
<td>Nassau</td>
<td>0.62</td>
<td>New York (Manhattan) see New York City</td>
</tr>
<tr>
<td>New York City</td>
<td>8.38</td>
<td>Niagara</td>
<td>8.00</td>
</tr>

9. Write the style sheet that will arrange the following page: the sidebar should be on the right side of the page, the image, photo1, should float left in the paragraph, and the footer to clear (i.e. not overlap) with other parts of the page.
(Hint: Do not change any of the HTML code.)

<html>
<head>
<title>Lehman E-News: Nov. 6</title>
<link rel="stylesheet" type="text/css" href="../enews_style.css" />
</head>
<body>
<div id="nav1">
<ul>
<li><a href="about.html">About Us</a></li>
<li><a href="archives.html">Past Issues</a></li>
<li><a href="subscribe.html">Subscribe</a></li>
</ul>
</div><!-- nav1 -->
<div id="sidebar">
<ul>
<li><a href="feat_collins.html">
<img src="images_issue/sm_collins.jpg" alt="Billy Collins" />
Prof. Billy Collins Receives Literary Medal</a></li>
<li><a href="feat_studyabroad.html">
<img src="images_issue/sm_studyabroad.jpg" alt="Egypt" />
Annual Study-Abroad Fair Oct. 23</a></li>
</ul>
</div><!-- sidebar -->
<div id="main">

</div><!-- main -->
</body>
</html>
Theresia Walser, one of Germany’s most exciting young playwrights, will visit Lehman College Nov. 6 to discuss her recent work.

The CSS file:

```css
#sidebar {
    width: 250px;
    float: right;
}
#photo1 {
    width: 100px;
    float: left;
}
#footer {
    clear: both;
}
```

10. Write a complete HTML file and CSS file to display information about your favorite foods. The page should have a header, with title, and a footer with your contact information, as well as a sidebar with a short description of where you can find such foods (either a link to a restaurant or a recipe). The description of each food should include a title, a link, and a paragraph describing the food. They should occur one after the other in the page (i.e. “flow”) and each have a different background color. The sidebar should appear to the right of the food descriptions, and the footer should be at the bottom of the page, not overlapping any other section (i.e. it should “clear” all other sections).
Recipes for both of these can be found in books on Italian and Spanish cooking at Amazon.

Pesto is made from fresh basil, garlic, olive oil, and salt.

An ice cream, Dulce de Leche, is made from milk and sugar and has a smooth caramel taste.