1. True or False:

   (a) **F** Only HTML code can be validators. There are no validators for CSS or XHTML.
   
   (b) **T** In CSS, all properties and values go between { } braces.
   
   (c) **F** In CSS, you can only specify one selector for each set of rules.
   
   (d) **T** The span element is used to style in-line elements.
   
   (e) **F** The div element is used to style in-line elements.
   
   (f) **F** All headings on a given page must be the same color.
   
   (g) **F** Font size is always relative to the smallest font on the page.
   
   (h) **F** Pseudoclasses must be defined in your HTML file to be used.
   
   (i) **F** In strict HTML, you can nest block elements inside block elements.
   
   (j) **T** In strict HTML, You can nest tables inside tables.

2. Answer in two sentences or less the following:

   (a) What does the div element do? Give an example.

      The div element divides the page into logical sections that can be arranged and styled. For example, a div can be used to make a sidebar menu that can have different style than the rest of the page and be ‘‘floated’’ to the side of the page.

   (b) What does the span element do? How does it differ from the div element? The span element is used to specify inline elements, so, they can be styled using CSS. The span element differs from the div element-- the former applies to inline elements, while the latter creates essentially a block element.

3. For each of the following, identify as whether it would be done in HTML or CSS:

   (a) **HTML** define a link
   
   (b) **CSS** change the color of a link
   
   (c) **CSS** change the color of text
(d) **CSS** change text color  
(e) **CSS** change text alignment

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>9</td>
<td>#9</td>
</tr>
<tr>
<td>9</td>
<td>#09</td>
</tr>
<tr>
<td>32</td>
<td>#20</td>
</tr>
<tr>
<td>187</td>
<td>#bb</td>
</tr>
<tr>
<td>255</td>
<td>#ff</td>
</tr>
</tbody>
</table>

32/16 = 2 remainder 0  
#bb = #b· 16 + #b = 11·16 + 11 = 176 + 11 = 187  
#ff = #f· 16 + #f = 15·16 + 15 = 240 + 15 = 255

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

**Insert the DOCTYPE line at the top of the file and change the HTML line:**

```html
<!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">
<body>
<p> <img src="logo/mypod.gif" alt="myPod Logo" />
(ADDED SPACE AND ")") </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.</p>
</body>
</html>
```
6. Be the browser with the following HTML and CSS files. Draw the page and indicate any style (color, borders, etc) on your page:

**HTML:**

```html
<html>
<head>
  <title>Welcome to the Department of Anthropology</title>
  <link rel="STYLESHEET" href="style.css" type="text/css">
</head>
<body>
<p><img src="images/students.jpg"></p>
<p><a href="anthropology.html">What is Anthropology? </a></p>
<table>
<tr>
<td><a href="fall2007.html">Fall 2007 Schedule</a></td>
<td><a href="spring2007.html">Spring 2007 Schedule</a></td>
<td><a href="summer2007.html">Summer 2007 Schedule</a></td>
</tr>
</table>
</body>
</html>
```

**CSS:**

```css
body {
  text-color: #333333;
  width: 600px;
}
.schedule {
  font: bold;
}
```
7. Write a complete CSS style sheet that:

- uses a bold font throughout the page,
- `<h1>` headings should be red,
- except for headings in the `<div>` element with id menu, which should have `<h1>` headings should be black, and
- create a solid border around paragraphs

```css
body {
  font-weight: bold;
}

h1 {
  color: red;
}

#menu h1 {
  color: black;
}

p {
  border: solid;
}
```

8. Write the HTML code for the table with the following information:
(No need to write any CSS rules or style sheets).
City Income Tax Rates

<table>
<thead>
<tr>
<th>City Taxable Income</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married Filing Jointly:</td>
<td>$21,600 or less</td>
</tr>
<tr>
<td>Head of Household:</td>
<td>$14,400 or less</td>
</tr>
<tr>
<td>Single/Filing Separately</td>
<td>$12,000 or less</td>
</tr>
<tr>
<td>Married Filing Jointly:</td>
<td>$21,600-$45,000</td>
</tr>
<tr>
<td>Head of Household:</td>
<td>$14,400-$30,000</td>
</tr>
<tr>
<td>Single/Filing Separately</td>
<td>$12,000-$25,000</td>
</tr>
</tbody>
</table>

<table>
  <caption>City Income Tax Rates</caption>
  <tr>
    <th>City Taxable Income</th>
    <th>Tax Rate</th>
  </tr>
  <tr>
    <td>Married Filed Jointly:</td>
    <td>$21,600 or less</td>
  </tr>
  <tr>
    <td>Head of Household:</td>
    <td>$14,400 or less</td>
  </tr>
  <tr>
    <td>Single/Filing Separately:</td>
    <td>$12,000 or less</td>
  </tr>
  <tr>
    <td>Married Filed Jointly:</td>
    <td>$21,600-$45,000</td>
  </tr>
  <tr>
    <td>Head of Household:</td>
    <td>$14,400-$30,000</td>
  </tr>
  <tr>
    <td>Single/Filing Separately:</td>
    <td>$12,000-$25,000</td>
  </tr>
</table>
<table>
<thead>
<tr>
<th>Annual Income Level</th>
<th>Single/Filing Separately</th>
</tr>
</thead>
<tbody>
<tr>
<td>$14,400-$30,000</td>
<td>$12,000-$25,000</td>
</tr>
</tbody>
</table>

Add 3.534% of excess

9. Write the style sheet that will arrange the following page to sidebar float to right, the image, photo1, float left, 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
<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">
    <h1>Features</h1>
    <p><img src="images_issue/walser.jpg" id="photo1" alt="Prof. Walser"
      Add 3.534% of excess</p>
  </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 three courses that you have taken. The page should have a header, with title, and a footer with your contact information. The three courses should be displayed side by side. Each should include a title, a link, and a paragraph describing the class. Each course should have a different background color.

**HTML:**

```html
<html>
<head>
  <title>My Courses</title>
</head>
<body>
  <div id="header">
    <h1>My Courses</h1>
  </div>
  <div id="leftCourse">
    <h2>CIS 228</h2>
    <p><a href="cis228.html">The course</a> covers the internet: HTML, CSS, and JavaScript.</p>
  </div>
  <div id="rightCourse">
    <h2>CMP 108</h2>
    <p><a href="cmp108.html">The course</a> covers programming animation and robots.</p>
  </div>
  <div id="centerCourse">
    <h2>CMP 416</h2>
    <p><a href="cmp416.html">The course</a> covers computability theory.</p>
  </div>
  <div id="footer"></div>
</body>
</html>
```

**CSS:**

```css
#leftCourse {
  width: 250px;
  float: left;
}
#rightCourse {
  width: 250px;
  float: right;
}
#centerCourse {
  width: 250px;
}
#footer {
  clear: both;
}
```