25 Points – Quick Answers, 1 point each. Do any 25; do more for extra credit.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Japan</strong></td>
<td>What does it mean when a URL ends in .<strong>jp</strong>?</td>
</tr>
<tr>
<td><strong>Russian Federation</strong></td>
<td>What does it mean when a URL ends in .<strong>РФ</strong>?</td>
</tr>
<tr>
<td><strong>Yes</strong></td>
<td>Yes/No: Is the color &quot;<strong>#600FF</strong>&quot; browser safe?</td>
</tr>
<tr>
<td><strong>No</strong></td>
<td>Yes/No: Is the color &quot;<strong>#600FF</strong>&quot; browser safe?</td>
</tr>
<tr>
<td><strong>#3366FF</strong></td>
<td>What is the closest browser safe color to &quot;<strong>#3267F0</strong>&quot;?</td>
</tr>
<tr>
<td><strong>DarkKhaki</strong></td>
<td>What is the color name for the color &quot;<strong>#BDB76B</strong>&quot;?</td>
</tr>
<tr>
<td><strong>183</strong></td>
<td>What is the green value, in decimal, for the color &quot;<strong>#BDB76B</strong>&quot;?</td>
</tr>
<tr>
<td><strong>Yellow</strong></td>
<td>What color (approx.) is shown on screen by the code &quot;<strong>#FEED1B</strong>&quot;?</td>
</tr>
<tr>
<td><strong>#FDF5E6</strong></td>
<td>What is the hexadecimal color code for the color &quot;<strong>OldLace</strong>&quot;?</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>How many bits are in a byte?</td>
</tr>
<tr>
<td><strong>255</strong></td>
<td>What is the maximum value in decimal that can be stored in a byte?</td>
</tr>
<tr>
<td><strong>FF</strong></td>
<td>What is the max value in hexadecimal that can be stored in a byte?</td>
</tr>
<tr>
<td><strong>32</strong></td>
<td>How many bits are in an IPv4 address?</td>
</tr>
<tr>
<td><strong>128</strong></td>
<td>How many bits are in an IPv6 address?</td>
</tr>
<tr>
<td><strong>F5</strong></td>
<td>Convert the decimal number 245 into hexadecimal.</td>
</tr>
<tr>
<td><strong>16</strong></td>
<td>Convert the hexadecimal number <strong>10</strong> into decimal.</td>
</tr>
<tr>
<td><strong>Classful Addressing</strong></td>
<td>What preceded CIDR?</td>
</tr>
<tr>
<td><strong>Client</strong></td>
<td>When you request a Web page from the Internet, does your Web browser represent the client or the server?</td>
</tr>
<tr>
<td><strong>H&lt;sub&gt;2&lt;/sub&gt;O</strong></td>
<td>Typeset the chemical formula <strong>H&lt;sub&gt;2&lt;/sub&gt;O</strong> in HTML.</td>
</tr>
<tr>
<td><strong>Class B</strong></td>
<td>Most UMass IPv4 addresses have the form: <strong>128.119.<strong><strong>.</strong></strong></strong> In classful addressing, what class is represented?</td>
</tr>
<tr>
<td><strong>Star</strong></td>
<td>Which network has many machines talking to a central computer?</td>
</tr>
<tr>
<td><strong>Pareidolia</strong></td>
<td>What is it called when random data (either visual or audible) are perceived to have structure and pattern?</td>
</tr>
</tbody>
</table>
### DNS
What maps URLs onto IP addresses?

### Router
What device “hides” a home network behind a single IP address?

### Hub
What device connects several computers to a cable modem without hiding behind a single address (i.e., every machine's IP is visible).

### False
True/False: It costs spammers a lot to send a single bulk email.

### €
What is another way of encoding the symbol € besides \&euro; ?

### Size (H1 is bigger)
What is the difference between the `<H1>` and `<H2>` tags?

### `<DEL>`
The `<S>` tag is deprecated. What do you use instead?

### `<UL TYPE="square">`
In an unordered list, how do I make a list item symbol a square?

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10 Points – Short Answer – The Washington Redskins football team has correctly predicted the winner of every presidential election (except one) since 1936. When they play their last home game before the election, a win predicts that the incumbent party retains the White House, and a loss predicts that the challenging party will win. The Redskins lost on Monday, November 3, 2008, and the Democrats won the election the next day, extending the record to 18-1. In searching the Web, we might find a site which demands that we believe the two sets of events are closely linked. Discuss the various forms of bias exhibited by that site, including the kinds of mistakes a person with poor critical thinking skills might make. How do we tell that the site is biased? How can we explain this phenomenon in an unbiased manner?

It is pretty clear that the two events have no direct cause-and-effect relationship. At best there is correlation, but no causality, and at worst it is pure coincidence. The site that we find insists on the presence of causality may ignore the single case where the prediction failed, and instead concentrate on the many apparent successes. This is similar to confirmation bias (we remember cases that agree with the prediction, but ignore or forget those that don’t agree). We can tell the site is biased if there is uncritical insistence on the faux causality.
20 Points – Find and correct all the errors in the following HTML code:

```html
<HTML>
 <HEAD> 
  <TITLE> My Wonderful Web Page </TITLE> 
 </HEAD> 

 <BODY BGCOLOR="green" BACKGROUND="frog.gif"> 
 <CENTER> 
  <H2> Welcome! </H2> 
 </CENTER> 

 This is my new Web page, and I hope that you really like it! Here is one of my favorite links:

 <A HREF="http://www.cnn.com/"> 
  <IMG SRC="News.jpg" WIDTH="320" TITLE="Click me for the News"> 
 </A> 

 <H8>H6> Copyright © 2012 William T. Verts </H8>H6> 

 </BODY> 
</HTML>
```
45 Points –

1. (15 points) Short Answer – Consider the opening tag:

   ```html
   <BODY BGCOLOR="#F00FF0" BACKGROUND="frog.gif">
   ```

   Describe in words what is different in how the browser renders the page when (A) the image loads correctly and (B) when it does not load at all.

   When the image is loaded correctly, the `frog.gif` file will tile over (completely fill) the visible browser window, obscuring the background color. When the image does not load, the background color will appear instead. (This is a good reason to include both; the background color will show if the image loads slowly or cannot be loaded at all.)

2. (15 points) Write an HTML fragment (NOT a complete Web page!) to create an ordered list containing three list items: Dog, Cat, Rat, but where Rat is a link to a Web site called www.rats.com.

   ```html
   <OL>
   <LI>Dog</LI>
   <LI>Cat</LI>
   <LI><A HREF="http://www.rats.com/">Rat</A></LI>
   </OL>
   ```

3. (15 points). Write an HTML fragment (NOT a complete Web page!) to create a table, with a border, containing one row and two columns. The first cell must contain the string Frog and the second cell must contain the string Toad.

   ```html
   <TABLE BORDER>
   <TR>
     <TD>Frog</TD>
     <TD>Toad</TD>
   </TR>
   </TABLE>
   ```