Conceptual Exercise - CSS Fundamentals

1. Explain how CSS differs from HTML in the context of web development.

CSS allows you to style your content while HTML is used to structure your content. CSS allows you to position your content, add color and animations, and much more.

2. List the methods of including CSS in an HTML document and briefly describe each.

1 - Internal: Using the <style> element within the HTML file and writing CSS in the <head> section.
2 - External: Using an external stylesheet and linking to the HTML file with <link>. This is the preferred method.
3 - Inline: Using the <style> element throughout the HTML file. This method is not recommended.

3. Describe the anatomy of a CSS rule.

First, you write the selector, the HTML element that you'd like to style.
Second, is the declaration block, declarations will be placed within curly brackets { }.
Lastly, you add the property and value. The property on the left and value on the right, separated by a colon (:). And a semicolon (;) is placed after the last value.
Example:
h1 { background-color: blue; }

4. When might you want to use RGBA instead of RGB?

The A in RGBA means Alpha, the Alpha changes the transparency of the color. So, you'd use it when you want to adjust the transparency.

5. How do Hex color values differ from RGB?

Hex color values use 6 digits that range from 0 to 9 plus A, B, C, D, E, and F. RGB uses 3 values ranging from 0 to 255.

6. When might a developer prefer to use HSL over other color formats?

It is best to use HSL when you are looking for more control over your color selection. But, it may not be as useful if you are looking for a specific color to match a color scheme.

7. What are the primary text properties used in CSS to modify the appearance and layout of text?

Some examples:
text-align, text-decoration, text-transform, color, font-size, font-family, font-weight, line-height.

8. In what scenarios might it be beneficial to use vh or vw as a unit for font size?

These are useful when you'd like for the text to be proportional to the size of the window/viewpoint.

9.   Explain the difference between `em` and `rem` units.

em is relative to the font size of the closest parent. rem is relative to the root font size.

10. If multiple font families are listed in the font-family property, how does the browser decide which one to display?

The browser will choose the next available font within the font family list.