Exercises: Getting Started

1. Try JavaScript interactively

- If you use Firefox, install Firebug from http://getfirebug.com/. Copy the simple test-page.html from the section's source code archive (javascript-getting-started), load it in Firefox, then launch Firebug by clicking on the Firebug icon or hitting F12. Click on the Console tab and try some interactive JavaScript commands. Customize the console as described in the notes if you wish.
- If you use Chrome, copy the simple test-page.html from the section's source code archive (javascript-getting-started), load it in Chrome, then launch the developer tools with Control-Shift-J. Click on the Console tab and try some interactive JavaScript commands. Most browsers, even Internet Explorer and Microsoft Edge have something similar now.

2. Define a variable x and give it a value of 5. Evaluate x and verify it shows the value.

3. Enter this function into the console:

```
function half(x) {
  return(x / 2);
}
```

Try to predict what you will get for half(x), half(4), and half(3). It is simple to predict what you will get for half(4), but, depending on your programming background, it might not be so easy to predict what you will get for half(x) and half(3). Call half(x), half(4), and half(3) and see if you were right.

4. Try to predict what you will get if you evaluate x in the console. Is it still 5, or is it 3? Try it and see.

5. Enter this function into the console:

```
function seven() {
  x = 7;
  return(x);
}
```

Call seven() in the console. Try to predict what you will get if you evaluate x in the console. Try it and see. How do you explain the surprising result?

6. Make a function called calculation that, given three numbers a, b, and c, returns (a + b)/c. Try it with a few normal values. Then, try to predict what you will get for calculation(1, 1, 0), calculation(-1, -1, 0), and calculation(1, -1, 0). Try those tests and see if you get what you expected.

7. Try the "more powerful practice" approach from the notes, where you load an HTML file that has a script tag pointing at a JavaScript file. Put a function definition in the JS file, load the HTML file, go to the console, and call the function. Then, add a second function definition to the JS file, reload the HTML file, return to the console, and call the new function.

8. Write a function called isEven that, given a number, returns true if the number is even and false if the number is odd. This would be simple if we had covered if statements or the ?: ternary operator, but we haven't, so you cannot use either one.