Below are the main types of problems:

* **Problems with wrong correct answers (student who chose the right answer will get the point back)**: Q33, Q17, Q20
* **Problems multiple correct answers (student who chose any of the right answer can get the point)**: Q16, Q14, Q5
* **Problems with no correct answer (everyone will get points on those questions)**: Q4, Q32

**Problem with wrong correct answers:**

The correct answer for the following questions(highlight in red) in the midterm is miss defined. I will use the highlight the right answers use yellow highlight. If you choose the right ones during the midterm, you can get your point back.

Question 33:

What does following code do?

<script src="https://unpkg.com/leaflet@1.4.0/dist/leaflet.js"></script>

Add the leaflet javascript library

Add a base map to the webpage

Add external stylesheet

**Explanation: The correct answer is “add the leaflet JavaScript library”, the js in “leaflet.js” is for “JavaScript”**

Question 17:

Which of the following CSS selector would be used to select the span tag?

<div>

Hello <span id=”world”>world</span>

</div>

.world{...}

world{...}

#world{...}

@world{...}

**Explanation: The correct answer is to use “#” symbol to select the specific id. “.” is used to select class.**

Which of the following is the right way to declare a function is javascript?

function = cal()

function : cal()

function := cal()

function cal()

**Explanation: The correct answer is “function cal()” you directly add the name of the function and the bracket after the “function” to declare a function in javascript**

**Question with multiple correct answers:**

Here are some questions has multiple correct answers since some of the options have some flaws. If you choose one of the correct answer, you can get your point back.

Question16:

Which of the following statements is wrong about HTML DOM?

DOM defines the properties, the methods to access, the event for all HTML elements

The HTML DOM is a standard object model and programming interface for HTML.

DOM stands for ‘Document Object Model’

The HTML DOM model is constructed as a linear line of Objects

**Explanation: The HTML DOM model is constructed as a tree of Objects instead of linear objects. However, HTML is a program interface for Javascript instead of HTML. So if you choose the second option, you are also right.**

Question14:

Which of the following factors is not the reason that a web map might not perform as good as desktop GIS?

File online will be compressed thus has lower quality

Information is sent “across the wire” from the server to the browser

Information is pulling from several different servers

There will be many people using the server at the same time

**Explanation: Upload file online to the website or map won’t compress the file size, neither lower the quality. In a web map, any information you see has to be sent “across the wire” from the server to your browser, introducing latency. Performance may be affected by other people using the server at the same time. Besides, you may be pulling in information from several different servers. Your map performance is therefore limited by the availability and speed of all the servers you're using. However, the forth option may seem vague and unclear, so if you chose that, it’s also right.**

Question5:

Which of the following won’t open the develop tool in chrome?

Press F12 in Chrome

"option + command + i(or j)" on ios system, "Control + Shift + i(or j)" on windows system

right click on the page you want to inspect then select "View page source"

Click the three dot option icon at the top-right corner of chrome window and select "More tools", then select chrome "Developer tools"

**Explanation: For the third option, you should click “inspect” instead of “view page source”. “View Page Source” will only return the raw html file instead of developer tools. However, in the IOS system, you need to press “Fn + F12” to open the chrome developer tool. So the first one could also be a right answer.**

**Question without right answers:**

Question 4:

What is the shortcut that used to open atom-live-server and close it in default port?

‘Ctrl + alt + l’ to open, ‘ctrl + alt + q’ to close

‘Ctrl + alt + l’ to open, ‘ctrl + alt + l’ to close

‘Ctrl + alt + p’ to open, ‘ctrl + alt + l’ to close

‘Ctrl + l’ to open, ‘ctrl + p’ to close

Explanation: The first option has a typo that the “q” should be “p”. So there was no right answer for this question.

Question 32

What is the right order to setup a web page for the map?

1.Create a map object in JavaScript that will interact with the map div element

2. Add a div element to our page that will hold the map.

3.Add the tiled OpenStreetMap baseman to our map object using tile Layer

4.Reference the Leaflet CSS and JavaScript files

4-3-1-2

1-2-3-4

2-4-3

3-1-2-4

**Explanation: The correct order should be “4-2-1-3” for more detail you can read the page here.** [**https://github.com/jakobzhao/geog458/tree/master/weeks/week04/leaflet**](https://github.com/jakobzhao/geog458/tree/master/weeks/week04/leaflet)

**So there’s no correct answer among the options.**