Assessment

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You can use the submit your answers to the Assessment via the Module 2 Quiz on Canvas. Questions are listed here with hyperlinks to the relevant section of the module if you need help finding answers. If you would like a .pdf version of the instructions, you can it download it here.

Written Answers & File Uploads

Written answers should be brief but they should adequately answer the question. Bullet point format is sufficient unless otherwise specified. All written answers & maps will be evaluated following this general rubrics below.

- Scores & categories are general guides, you TA may assign scores between these levels
- Your TA will provide brief comments where applicable, if you need more feedback you can follow up with your TA.

Written Answer Rubric

Score	Category	Details
0%	Missing	N/A
40%	Insufficient	Minimal effort, missing major key points, or serious logical flaws
60%	Below Expectations	Missing a few key points or minor logical flaws
80%	Met Expectations	Hits key points and mostly well constructed
100%	Exceeds Expectations	Clearly thought out, concise, and astute

Map Rubric

Score	Category	Details
0%	Missing	N/A
40%	Insufficient	Serious errors in analysis, missing data, or major stylistic issues
60%	Below Expectations	Minor errors in analysis or multiple stylistic issues
80%	Met Expectations	Error free analysis, minor stylistic issue
100%	Exceeds Expectations	Error free analysis and clean, aesthetically pleasing map

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Lecture Content Questions

1 _____ have well defined boundaries. They are countable, meaning there is only a finite number of them.

2 _____ lack well defined boundaries. Because of this, they can be measured at an infinite number of locations.

3 We rarely work with multiple types of phenomena at once in GIS because it is too complicated. [T/F]

4 For these data types, we cannot calculate meaningful numerical statistics. (Select all that apply).

- Nominal
- Ordinal
- Interval
- Ratio

5 Briefly discuss the difference between qualitative and quantitative data and their respective sub-types.

6 Negative spatial autocorrelation indicates clustering. [T/F]

7 The _____ data model represents space as a continuous grid of cells and each cell can contain only one attribute.

8 The _____ data model represents features in space as discrete two-dimensional polygons, one-dimensional lines , and/or "zero-dimensional" points. Attribute(s) are stored separately in a table, and each row can have numerous attributes.

9 Polygons can be single part or multipart [T/F].

9 Both types of phenomena can be represented using either the data model. But generally speaking, continuous fields phenomena are better represented by the _____ model and discrete objects are better represented by the _____ data model.

10 Higher resolution rasters have smaller cells which means they take less memory to store. [T/F]

11 The _____ pertains to how we assign data values to grid cells that cover more than one value.

12 Resolution is a property of the [data/map/both], scale is a property of the [data/map/both].

Lab Application Questions

Unless otherwise specified, numeric answers have a margin of error of 0.01, so give all responses to at least the hundredths place.

13 What is NDVI and what is it used for? Describe the patterns you see in NDVI across the metro Vancouver area.

14 Looking at the **VanDA_2016** layer, for every $100 increase in income at the DA level, how much does rental price increase?

15 Looking at the **VanDA_2016** layer, What is the R2 score for this model?

16 Which Census Unit displays a more direct relationship between Income and Housing? - DA - CT - About the same

17 What are the differences you notice between the CTs and DAs in terms of area and population?

18 What value does the Natural Breaks method determine should denotes the lower bound of the "Green Vegetation Class?"

19 What does data normalization do?

20 Describe the relationship between the **Mean** NDVI value per DA and and the **Green Veg Fraction** per DA. Are they telling us the same thing? How Strongly are they related?

21 What is the R2 score for **Green Veg Fraction** vs. **Income**?

22 What is the R2 score for **Mean** vs. **Income**?

23 Are either of these variables strongly linked to income? Explain why or why not? Are there any improvement you think we could make to this analysis?

24 Export your Layout as a .pdf and upload it to Canvas.