Quiz 4: Raster Math and Raster Operations

Due Sep 22 at 5:30pm   **Points** 15   **Questions** 6

Available Sep 21 at 5pm - Sep 22 at 5:30pm   **Time Limit** 60 Minutes

This quiz was locked Sep 22 at 5:30pm.

Attempt History

	Attempt	**Time**	**Score**
LATEST	**Attempt 1**	48 minutes	13 out of 15

Score for this quiz: **13** out of 15

Submitted Sep 22 at 2:39pm

This attempt took 48 minutes.

Question 1   2 / 2 pts

You may have to perform raster analysis on two layers with different resolutions (cell size).

In order to minimize ambiguities in your output data, what should you do prior to analysis?

Correct!

- ◉ Resample

- ○ Reproject

- ○ Dissolve

- ○ Vectorize

Question 2   1 / 1 pts

Map algebra operations may be local, neighborhood, or global

Correct!

◉ True

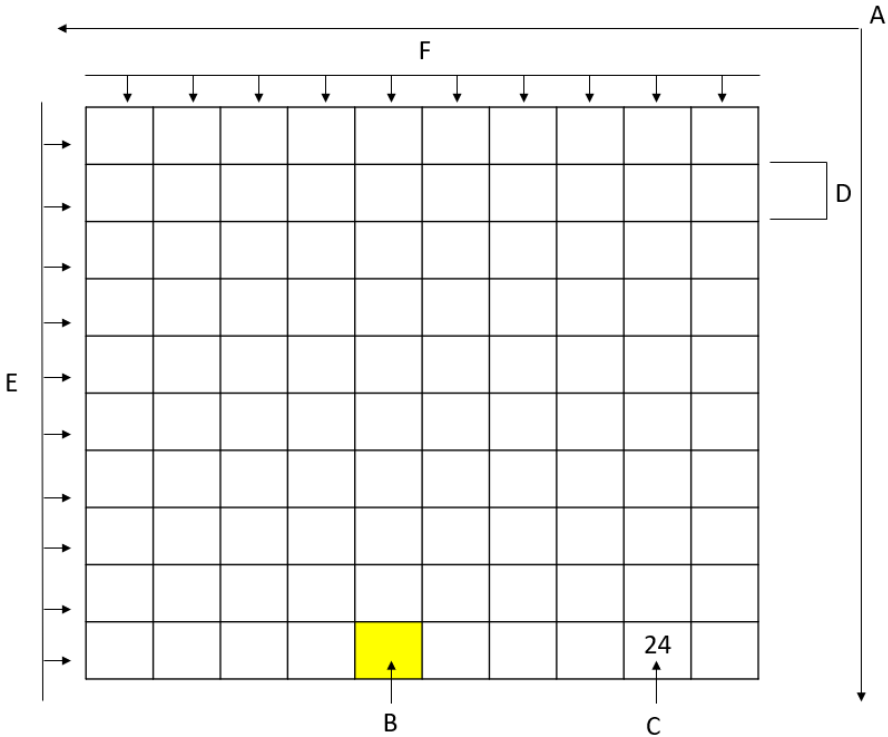○ False

Question 3   4 / 4 pts

Identify the labeled components of the Raster dataset shown here:

Correct!

A

Grid Extent ⌄

Correct!   **B**   Grid Cell (aka pixel) ⌄

Correct!   **C**   Grid Value ⌄

Correct!   **D**   Resolution ⌄

Correct!   **E**   Row ⌄

Correct!   **F**   Column ⌄

Other Incorrect Match Options:
- McGriddle
- Grid Band

Question 4   0 / 2 pts

Inputs

4	1	3
3	3	2
1	2	N

????

2	1	3
N	3	3
3	2	2

=

Output

0	1	1
N	1	0
0	1	N

○ XNOT

○ OR

ou Answered   ◉ NOT

orrect Answer   ○ AND

Question 5   4 / 4 pts

Describe a real-world example of something you'd want to map with raster data. Use complete sentences.

Your Answer:

Something I would want to map with raster data would be the values for different elevations in regions that have a lot of elevation, such as the middle east, since we can represent the values for different spatial elevation on the pixels, I think it would be a good use of raster data mapping.

Question 6   2 / 2 pts

The raster calculation for NDVI

NDVI = [(Band 5 - Band 4)/(Band 5+ Band 4)]

uses...

○ Spherical Geometry

○ Coupled Math

Correct!   ◉ Nested Raster Math

○ Cell Iterators

Quiz Score: **13** out of 15