Quiz 5: Terrain Analysis and Hydrospatial Analysis

Due Sep 29 at 4:15pm **Points** 15 **Questions** 6
Available Sep 28 at 4:15pm - Sep 29 at 4:15pm 24 hours **Time Limit** 60 Minutes

This quiz was locked Sep 29 at 4:15pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	59 minutes	13 out of 15

Score for this quiz: **13** out of 15
Submitted Sep 28 at 10:13pm
This attempt took 59 minutes.

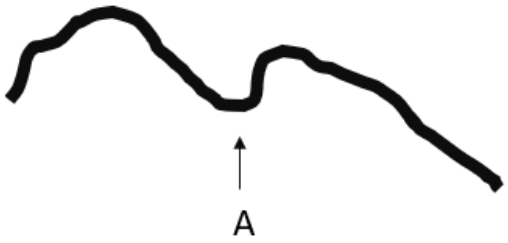
Question 1

2 / 2 pts

The following is a raster of terrain and a visualization of its profile.

What is point A called?

75	82	80
76	60	75
80	84	85



Correct!

- (●) Sink Pit
- ( ) Pothole

Burrow

Washbasin

Question 2

2 / 2 pts

Match the terrain variables with its derivative level.

Correct! **Slope** — First Derivative

Correct! **Aspect** — First Derivative

Correct! **Planform Curvature** — Second Derivative

Correct! **Flow Direction** — Second Derivative

Question 3

3 / 3 pts

Identify an engineering-based scenario in which you'd want to use viewshed analysis and explain why you would use viewshed analysis.

Be specific and use complete sentences.

Your Answer:

An engineering-based scenario in which I would want to use viewshed analysis would be when determining whether the location for which I

intend to place a communications antenna is okay. I would use viewshed analysis in this case since, the area in which the antenna is to service, might be a tourist spot, and I don't want the antenna to disturb the tourists, so I would need viewshed here to hide the antenna in a place, where most tourists would not look and wouldn't bother them.

Question 4

2 / 2 pts

Fill in the blanks with the corresponding full-word name for each acronym

DEM: Digital Elevation Mc

DSM: Digital Surface Mod

DTM: Digital Terrain Mode

TIN: Triangulated Irregul

Answer 1:

Correct!

digital elevation model

orrect Answer

Digital Elevation Model

Answer 2:

Correct!

digital surface model

orrect Answer

Digital Surface Model

Answer 3:

Correct!

digital terrain model

orrect Answer Digital Terrain Model

Answer 4:

ou Answered Triangulated Irregular Network

orrect Answer triangular irregular network

orrect Answer Triangular Irregular Network

Question 5

4 / 4 pts

When you were little, did you ever roll down a hill for fun? Those were the days!

Imagine you are at a park - you're thinking about running up a hill.

Would you rather know about its *planform curvature* or *profile curvature* before you decide to run up? Justify your answer.

Your Answer:

If I were to run up a hill I believe I would care for the profile curvature, because this curvature concerns the rate of change of the slope, the things that affect the positive and negative acceleration of flow.

Question 6

0 / 2 pts

You are modelling water flow using a digital elevation model. You chose to run tools to sink one area and fill a second area.

What then happens to your modelled water?

ou Answered

- (selected) Water would pool at the site in question

orrect Answer

- Water would continue to flow normally past the areas
- Water would change direction 180 degrees
- The software tool would fail. You cannot both sink AND fill in a DEM

Quiz Score: **13** out of 15