



Broward College

Rules: You must be a Broward College student, currently enrolled in at least one class.

Each student may submit only one solution to one campus per question. You may not submit a solution to more than one campus. Please submit a PDF of your solution to one of the email addresses below or turn your paper in to the math department on your campus. If your file is not a PDF, your submission may not be graded.

Prizes for each Challenge Question: For each Math Challenge Question, each campus will randomly select one winner from the acceptable correct solutions. Acceptable correct solutions must have the correct answer and show appropriate work or reasoning to be eligible to win a prize.

Grand Prize for each Semester: For each acceptable correct solution during the semester, the student will receive one entry into the Grand Prize drawing for a TI-84CE graphing calculator! One calculator will be awarded per campus.

Submit your solution to the ONE campus that best describes your Math class or class schedule:

Central Campus:	Bldg. 7, 2 nd Floor	Contact: Prof. Hearn, qhearn@broward.edu
North Campus:	Bldg. 57, Room 101	Contact: Prof. Brooks, jbrooks@broward.edu
South Campus:	Bldg. 69, 2 nd Floor	Contact: Prof. Muniz-Alvarez, lmunizal@broward.edu
Online Campus:	Bldg. 57, Room 101	Contact: Prof. Brooks, jbrooks@broward.edu

Deadline: **Friday, February 28, 2025 by 5:00 pm (Late submissions will not be accepted)**

You may work on the back of this page or attach additional pages if more space is needed.

Print Your Name: _____ Student ID: _____

Current Math Instructor (if any): _____ Campus Submitted: _____

BC Email: _____@mail.broward.edu

Answer the following question.

The country of Mathlandia has 8 cities. The following cities are connected by highways:

- Abeltown (A) and Fermatgrove (F)
- Abeltown (A) and Gaussburg (G)
- Abeltown (A) and Newtonfield (N)
- Abeltown (A) and Leibnizville (L)
- Cantorville (C) and Gaussburg (G)
- Cantorville (C) and Newtonfield (N)
- Euclidburg (E) and Fermatgrove (F)

- Euclidburg (E) and Hamiltonia (H)
- Euclidburg (E) and Leibnizville (L)
- Fermatgrove (F) and Newtonfield (N)
- Gaussburg (G) and Hamiltonia (H)
- Gaussburg (G) and Leibnizville (L)
- Hamiltonia (H) and Newtonfield (N)

Sammy the Seahawk took a trip to Mathlandia. His flight landed in Abeltown. Identify all paths (sequences of cities) that he could have taken to drive to all of the cities, visiting each city exactly once and arriving back in Abeltown using only the highways listed above.

(Remember: Your solution must show appropriate work or reasoning.)