





## **Broward College**

**<u>Rules:</u>** 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 <sup>nd</sup> Floor	Contact: Prof. Hearn, <u>qhearn@broward.edu</u>	
North Campus:	Bldg. 57, Room 101	Contact: Prof. Brooks, <u>jbrooks@broward.edu</u>	
South Campus:	Bldg. 69, 2 <sup>nd</sup> Floor	Contact: Prof. Muniz-Alvarez, <u>lmunizal@broward.edu</u>	
Online Campus:	Bldg. 57, Room 101	Contact: Prof. Brooks, <u>jbrooks@broward.edu</u>	

Deadline: Friday, November 15, 2024 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.

Sammy the Seahawk and his sister Samantha love to sit around and discuss weird math facts. On one occasion, Sammy said aloud 4 consecutive integers and Samantha divided each by Sammy's age. Samantha added the 4 remainders and got a sum of 28. Then, Samantha said aloud 4 different consecutive integers and Sammy divided each of those by Samantha's age. Sammy added the 4 remainders and also got a sum of 28. What is the sum of Sammy's and Samantha's ages? Assume Sammy and Samantha's ages are different integer values.

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