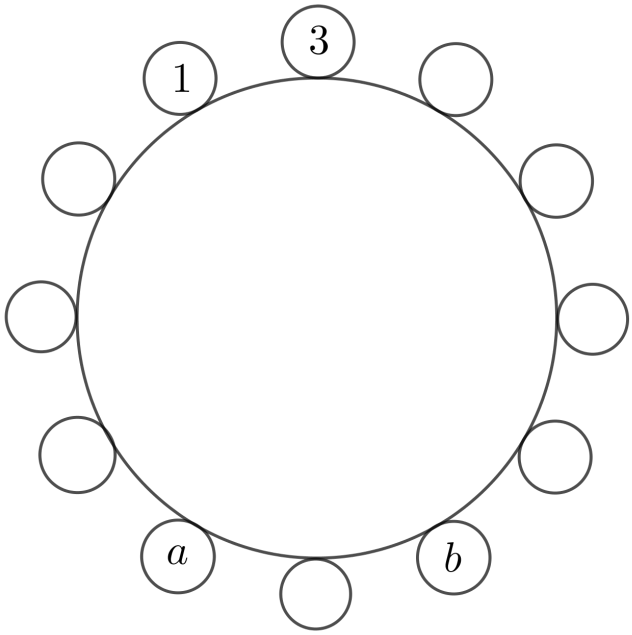
Problem of the Week

Problem C

Take a Seat 1

Twelve people are seated around a circular table. They each hold a card with a different integer from 1 to 12 on it. For any two people sitting beside each other, the positive difference between the integers on their cards is no more than 2. The people with integers 1, 3, a, and b are seated as shown.

What is the value of $a + b$?



NOTE: The *positive difference* between two numbers is found by subtracting the smaller number from the larger number.