Brookwood Math Team 8/28/2014

Problem 1

Problem 2



Problem 3

If , where , then 



Problem 4

The sides of a triangle with positive area have lengths , , and . The sides of a second triangle with positive area have lengths , , and . What is the smallest positive number that is **not** a possible value of ?



Problem 5

Two different prime numbers between and are chosen. When their sum is subtracted from their product, which of the following numbers could be obtained?



Problem 6



Problem 7



Problem 8



Problem 9



Problem 10



Problem 11



Problem 12



Problem 13



Problem 14



Problem 15

