

Latihan Soal Olimpiade Matematika SMP

Winter Camp Persiapan OSN 2019

Departemen Sains - Wardaya College

TEORI BILANGAN

1. Find the number of integers pairs (x, y) satisfying :

$$\frac{1}{x} + \frac{1}{y} = \frac{1}{2020}$$

2. Carilah semua Tripple (a, b, c) dari bilangan bulat positif ganjil berurutan sehingga $a < b < c$ dan $a^2 + b^2 + c^2$ merupakan bilangan empat digit yang semua digitnya sama.

3. Find the number of pairs (m, n) , where m and n are positive integer satisfying :

$$(m + 1)(2n + m) = 9000$$

4. If a_1, a_2, \dots are sequence that satisfying

- $a_1 = 1$
- $a_{2n} = n \cdot a_n$, untuk n is positive integer

What is the value of a_{2500} ?

5. Given that a, b, c are natural number. If $30|(a + b + c)$, Prove that $30|(a^5 + b^5 + c^5)$