

Math 1190 Quiz #5

Problem 1: Find all ordered pairs of real numbers (x, y) which satisfy the system of equations

$$\begin{aligned}\sqrt{x} + \sqrt{y} &= 3 \\ 3x + 2y &= 14.\end{aligned}$$

Problem 2: Prove that the number

$$3100^n - 650^n - 558^n + 117^n$$

is divisible by 2009 for every nonnegative integer n .

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