

AMC 8 Day 3 Prime Numbers and Composite Numbers

1 (1分) "If a whole number n is not prime, then the whole number $n - 2$ is not prime." A value of n which shows this statement to be false is _____. (1987 AMC 8 Problem, Question#20)

- A. 9 B. 12 C. 13 D. 16 E. 23

2 (1分) The sum of two prime numbers is 81. What is the product of these two prime numbers?
(Adapted from 2014 AMC 8 problem, Question#4)

- A. 85 B. 91 C. 115 D. 133 E. 158

3 (1分) What is the sum of the distinct prime divisors of 2022? (Adaped from 2016 AMC 8 Problem, Question#9)

- A. 341 B. 342 C. 344 D. 345 E. 347

4 (1分) If m is prime and n is composite, which of the following must be composite?

- A. $m + n$ B. $n + 2m$ C. $2(n - m)$ D. $2(n + m)$ E. $m - n$

5 (1分) In how many ways can 10001 be written as the sum of two primes?

- A. 0 B. 1 C. 2 D. 3 E. 4