

2025 June AMC8 Week 2 Day 3 - Multiplication Formula

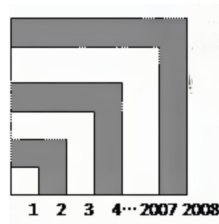
- 1 (1分) The average of five consecutive odd numbers is **1997**. What is the value of the square of the largest number minus the square of the smallest number?

A. 15976 B. 19432 C. 21432 D. 23976 E. 31952

- 2 (1分) What is the value of $9999^2 + 19999$?

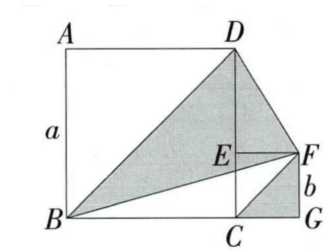
A. 100000000 B. 19999998 C. 9999 D. 199999999 E. 99999999

- 3 (1分) Calculate the shaded area formed by overlapping squares with side lengths $1, 2, 3, \dots, 2008$.



A. 2008000 B. 2009000 C. 2017036 D. 1000000 E. 2007000

- 4 (1分) Two squares with sides a and b satisfy $a + b = 10$ and $ab = 20$. Find the shaded area.



A. 20 B. 30 C. 40 D. 45 E. 60

- 5 (1分) The number $2^{48} - 1$ is divisible by two integers between 60 and 70. What are these integers?

A. 63, 65 B. 63, 64 C. 64, 65 D. 65, 66 E. 67, 68

