



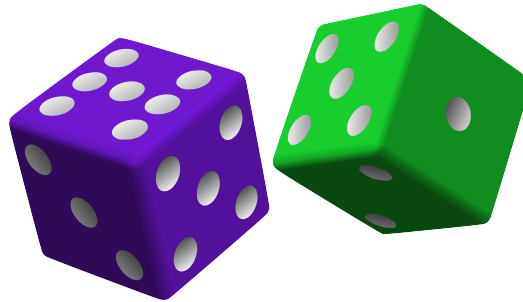
Problem of the Week

Problem C

Just Sum Dice

Ahmik created a game for his school's carnival where players roll two dice and find the sum of the two numbers on the top faces. If this sum is a perfect square or a prime number, they win a prize. To make it more interesting, Ahmik made the two dice using a 3D printer so that they each have the numbers 1, 2, 3, 5, 7, and 9 on their faces. One of the dice is purple and the other is green.

What is the probability that a player will win a prize after rolling the dice once?



NOTE:

A square of any integer is called a *perfect square*. The number 25 is a perfect square since it can be expressed as 5^2 or 5×5 .

A *prime number* is an integer greater than 1 that has only two positive divisors; 1 and itself. The number 17 is prime because its only positive divisors are 1 and 17.