



Problem of the Week

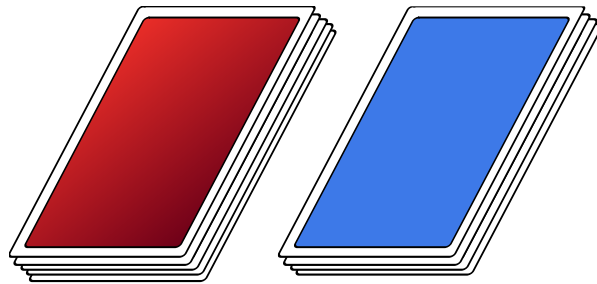
Problem C

Try Your Luck

At Fall Fairs you often find games of chance. The Red - Blue Card Game is one such game. The following information is known about the game:

- There are five red cards. Each red card has one of the numbers 1, 3, 5, 9 or 12 printed on it. Each number is used exactly once.
- There are four blue cards. Each blue card has one of the numbers 1, 3, 4 or 5 printed on it. Each number is used exactly once.
- You draw one red card and one blue card.

If the product of your two numbers is a perfect square, you have drawn a winning pair. What is the probability of drawing a winning pair?



A *perfect square* is an integer that can be created by multiplying an integer by itself. For example, the number 25 is a perfect square since it can be expressed by 5×5 or 5^2 .

