According to the rules of probability, the number of combinations of n items taken r at a time are:

\[ \frac{n!}{r! \cdot (n-r)!} \]

where \( n! = n \cdot (n-1) \cdot (n-2) \cdot \ldots \cdot 2 \cdot 1 \).

This rule applies to situations where the order of the items chosen is irrelevant, such as the drawing of 5 numbers out of 36 as used in the Fantasy 5 game.

In the Fantasy 5 game, \( n = 36 \) and \( r = 5 \). When the formula above is calculated with these values for \( n \) and \( r \), the result is 376,992.

\[ \frac{36!}{5! \cdot 31!} = \]

\[ \frac{36 \cdot 35 \cdot 34 \cdot 33 \cdot 32 \cdot 31}{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \cdot 31} = \]

\[ \frac{36 \cdot 35 \cdot 34 \cdot 33 \cdot 32}{5 \cdot 4 \cdot 3 \cdot 2} = 376,992 \]

This means that there are 376,992 different ways in which 5 numbers can be chosen from a total of 36 numbers. Therefore, the odds of correctly choosing the winning combination is 1 to 376,992.