Solution to Huygen's Third Exercise[1]

Let $C(n, k)$ denote the binomial coefficient "n choose k." The probability that 4 distinct suits are represented in the four cards drawn is clearly

$$\frac{C(10, 1)^4}{C(40, 4)} = \frac{10000}{91390}.$$

Therefore the part of the one is to the other as 1000 to 8139.