

Discrete Probability Theory

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If we assume that all hands are equally likely and that hands are chosen at random, then the probability of receiving Two Pair is 2.25 times more likely than the probability of receiving Three of a Kind.

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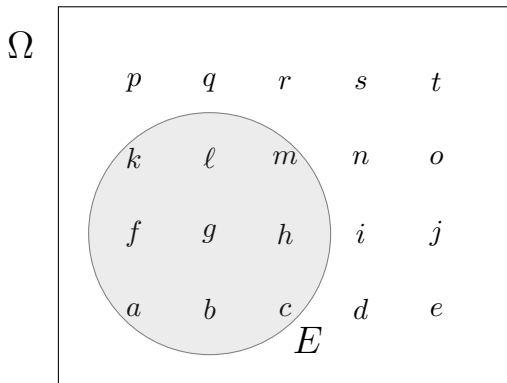
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The probability of an event E is the number of successes
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$$P(E) = \frac{\text{number of successes}}{\text{number of outcomes}} = \frac{|E|}{|\Omega|} = \frac{9}{20}.$$

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