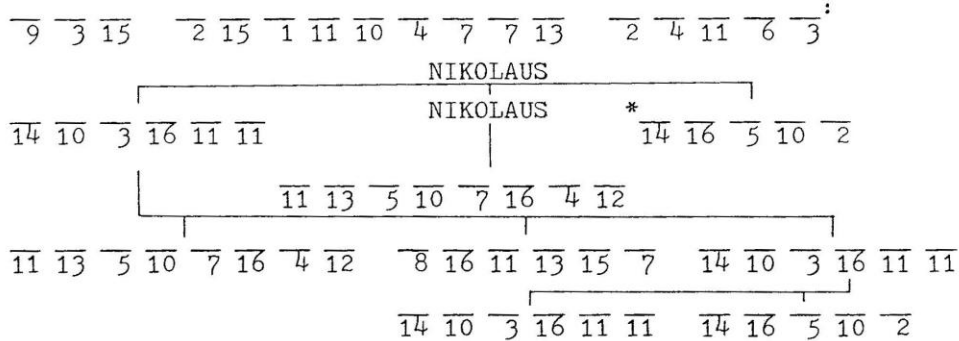


PROBABILITY

During the seventeenth and eighteenth centuries, this family included eight mathematicians of notable achievement. The * represents the one who pioneered in the theory of probability.



Fill in the blanks, above and below, with the letter which represents the correct answer.

- | | | |
|------|--|------------------------|
| I. | A card is drawn from a standard deck of 52 cards. Find each of the following probabilities: | A = $\frac{1}{2^{10}}$ |
| | 1. The card is a club. _____ | B = $\frac{1}{13}$ |
| | 2. The card is a four. _____ | C = $\frac{25}{102}$ |
| | 3. The card is a six or a seven. _____ | D = $\frac{1}{2^6}$ |
| II. | Two cards are drawn at random from a standard deck of 52 cards. | E = $\frac{1}{3^{10}}$ |
| | 4. How many different pairs are possible? _____ | F = $\frac{1}{10^2}$ |
| | Find each of the following probabilities: | G = $\frac{1}{10^3}$ |
| | 5. Both are kings. _____ | H = $\frac{2}{13}$ |
| | 6. Both are black. _____ | I = $\frac{1}{10}$ |
| | 7. Only one is a heart. _____ | J = 2 to 3 |
| | 8. One card is the king of hearts. _____ | K = $\frac{1}{221}$ |
| | 9. One card is the king of hearts or both are black. _____ | L = $\frac{13}{34}$ |
| | 10. One card is the king of hearts or both are red. _____ | M = 600 |
| III. | There are 15 men on a certain basketball team. 3 play center only, 5 forward only, and 7 guard only. | N = 630 |
| | 11. How many "starting 5's" are possible? _____ | O = $\frac{117}{442}$ |
| | 12. If 2 men who play guard only are dropped from the team, how many different "starting 5's" are possible? _____ | P = 360 |
| | 13. If you take a "wild guess" that 2 particular forwards will be on the starting team, what is the probability that you are correct? _____ | Q = $\frac{1}{6}$ |
| | 14. What are the odds that a certain forward will be on the starting team? _____ | R = $\frac{1}{4}$ |
| IV. | 15. On a 10 question multiple choice exam with 3 choices per question, what is the probability of getting all 10 correct if you are only guessing? _____ | S = 300 |
| | 16. On a 10 question true-false exam what is the probability of getting all 10 correct if you are only guessing? _____ | T = $\frac{188}{663}$ |
| | | U = 1326 |
| | | V = 3 to 2 |