

XVII. Match each item on the right with the concept it defines.

1. Bayes' theorem 20
2. Addition rule when events are mutually exclusive 1
3. Variance of a binomial probability distribution 19
4. Factorial rule for arranging all of the items of one event 16
5. Range for probability 5
6. Multiplication rule when the events are independent 15 or 7
7. Empirical probability 10
8. Subjective probability 23
9. General rule for addition 14
10. Permutation rule 2
11. To find a range given the probability 8
12. Classical probability 13
13. Mean of a probability distribution 25
14. Value of a complement 12
15. For independent events 7 or 15
16. Binomial distribution 18
17. To find the probability given a range 6
18. Combination rule 9
19. Poisson distribution 4
20. The complement of A 11
21. Variance of a probability distribution 17
22. The counting rule for multiple events 3
23. Is calculated for each value of x when determining a probability distribution 21
24. Mean of a binomial probability distribution 24
25. General rule for multiplication 22

1.	$P(A) + P(B)$
2.	$\frac{N!}{(N-R)!}$
3.	$M \times N$
4.	$\frac{\mu^x e^{-\mu}}{x!}$
5.	$0 \leq P(A) \leq 1$
6.	$\frac{x-\mu}{\sigma}$
7.	Joint probability is the product of the marginal probabilities
8.	$\mu \pm Z\sigma$
9.	$\frac{N!}{(N-R)!(R!)}$
10.	$\frac{A}{n}$
11.	(\bar{A})
12.	$1 - P(A)$
13.	$\frac{A}{N}$
14.	$P(A) + P(B) - P(A \text{ and } B)$
15.	$P(A) \times P(B)$
16.	$N!$ ways
17.	$[\sum x^2 \cdot P(x)] - [E(x)]^2$
18.	$\frac{n!}{x!(n-x)!} p^x q^{n-x}$
19.	npq
20.	$\frac{P(A) \times P(B A)}{P(A) \times P(B A) + P(\bar{A}) \times P(B \bar{A})}$
21.	$x \cdot P(x)$
22.	$P(A) \times P(B A)$
23.	Use empirical formula assuming past data of similar events is appropriate
24.	np
25.	$\sum [x \cdot P(x)]$