

Statistics for Data Science -1

Lecture 6.5: Probability- Application of addition rule

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8. Solve applications of probability.

Application of addition rule

Example: Shopping for shirts and pants

A customer that goes to the clothing store will purchase a shirt with probability 0.3. The customer will purchase a pant with probability 0.2 and will purchase both a shirt and a pant with probability 0.1. What proportion of customers purchases neither a shirt nor a pant?

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- ▶ Hence, $P(S \cup P)^c = 1 - 0.4 = 0.6$

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 - ▶ Event receives A's in both statistics and mathematics= $(S \cap M)$

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Section summary

1. Addition rule of probability.