

1. Record Nr.	UNINA9910464101803321
Autore	Goos Peter
Titolo	Statistics with JMP : graphs, descriptive statistics and probability // Peter Goos, David Meintrup
Pubbl/distr/stampa	West Sussex, England : , : Wiley, , 2015 ©2015
ISBN	1-119-03575-9 1-119-03574-0
Descrizione fisica	1 online resource (368 p.)
Classificazione	MAT029000
Disciplina	519.50285/53
Soggetti	Probabilities - Data processing Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title Page; Copyright; Contents; Preface; Acknowledgments; Chapter 1 What is statistics?; 1.1 Why statistics?; 1.2 Definition of statistics; 1.3 Examples; 1.4 The subject of statistics; 1.5 Probability; 1.6 Software; Chapter 2 Data and its representation; 2.1 Types of data and measurement scales; 2.1.1 Categorical or qualitative variables; 2.1.2 Quantitative variables; 2.1.3 Hierarchy of scales; 2.1.4 Measurement scales in JMP; 2.2 The data matrix; 2.3 Representing univariate qualitative variables; 2.4 Representing univariate quantitative variables; 2.4.1 Stem and leaf diagram 2.4.2 Needle charts for univariate discrete quantitative variables 2.4.3 Histograms and frequency polygons for continuous variables; 2.4.4 Empirical cumulative distribution functions; 2.5 Representing bivariate data; 2.5.1 Qualitative variables; 2.5.2 Quantitative variables; 2.6 Representing time series; 2.7 The use of maps; 2.8 More graphical capabilities; Chapter 3 Descriptive statistics of sample data; 3.1 Measures of central tendency or location; 3.1.1 Median; 3.1.2 Mode; 3.1.3 Arithmetic mean; 3.1.4 Geometric mean; 3.2 Measures of relative location 3.2.1 Order statistics, quantiles, percentiles, deciles 3.2.2 Quartiles; 3.3 Measures of variation or spread; 3.3.1 Range; 3.3.2 Interquartile range; 3.3.3 Mean absolute deviation; 3.3.4 Variance; 3.3.5 Standard

deviation; 3.3.6 Coefficient of variation; 3.3.7 Dispersion indices for nominal and ordinal variables; 3.4 Measures of skewness; 3.5 Kurtosis; 3.6 Transformation and standardization of data; 3.7 Box plots; 3.8 Variability charts; 3.9 Bivariate data; 3.9.1 Covariance; 3.9.2 Correlation; 3.9.3 Rank correlation; 3.10 Complementarity of statistics and graphics
3.11 Descriptive statistics using JMP
Chapter 4 Probability; 4.1 Random experiments; 4.2 Definition of probability; 4.3 Calculation rules; 4.4 Conditional probability; 4.5 Independent and dependent events; 4.6 Total probability and Bayes' rule; 4.7 Simulating random experiments;
Chapter 5 Additional aspects of probability theory; 5.1 Combinatorics; 5.1.1 Addition rule; 5.1.2 Multiplication principle; 5.1.3 Permutations; 5.1.4 Combinations; 5.2 Number of possible orders; 5.2.1 Two different objects; 5.2.2 More than two different objects; 5.3 Applications of probability theory
5.3.1 Sequences of independent random experiments
5.3.2 Euromillions; Chapter 6 Univariate random variables; 6.1 Random variables and distribution functions; 6.2 Discrete random variables and probability distributions; 6.3 Continuous random variables and probability densities; 6.4 Functions of random variables; 6.4.1 Functions of one discrete random variable; 6.4.2 Functions of one continuous random variable; 6.5 Families of probability distributions and probability densities; 6.6 Simulation of random variables; Chapter 7 Statistics of populations and processes
7.1 Expected value of a random variable

Sommario/riassunto

"Provides a comprehensive and rigorous presentation of descriptive statistics and probability theory that has been extensively classroom tested"--
