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Titolo	Pharmaceutical Calculations [[electronic resource] ] : A Conceptual Approach // by Michalakis Savva
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Descrizione fisica	1 online resource (xvii, 369 pages)
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Nota di contenuto	Measurement -- Error Assessment if the Drug Concentration In Pharmaceutical Mixtures -- Density And Specific Gravity -- Units Of Concentration And The Salt Factor -- Dilution And Concentration Of Pharmaceutical Solutions And Other Physical Mixtures -- Mixture Problems In Pharmaceutical Sciences.-Isotonic solutions -- Diffusion.- Use Of Prefabricated Dosage Forms In Extemporaneous Compounding -- Fluids And Electrolytes -- Essential Mathematics For Pharmacokinetics -- Rates And Orders Of Reactions -- Fundamental Concepts of Dosage Calculation -- Dosage Calculations Based On Body Surface Area.-Intravenous Infusion And Flow Rate -- Appendix I- Interpretation Of Prescriptions And Medication Orders.-Appendix II- Miscellaneous Abbreviations Commonly Used in Pharmacy -- Appendix III- Units Of Measurement And Equivalent Conversions -- Appendix IV- Selected Roman Numerals -- Appendix V -Specific Gravity Of Miscellaneous Liquids -- Appendix IV- Table Of Atomic Masses.
Sommario/riassunto	Pharmaceutical Calculations: A Conceptual Approach, is a book that combines conceptual and procedural understanding for students and will guide you to master prerequisite skills to carry out accurate compounding and dosage regimen calculations. It is a book that makes the connection between basic sciences and pharmacy. It describes the most important concepts in pharmaceutical sciences thoroughly,

accurately and consistently through various commentaries and activities to make you a scientific thinker, and to help you succeed in college and licensure exams. Calculation of the error associated with a dose measurement can only be carried out after understanding the concept of accuracy versus precision in a measurement. Similarly, full appreciation of drug absorption and distribution to tissues can only come about after understanding the process of transmembrane passive diffusion. Early understanding of these concepts will allow reinforcement and deeper comprehension of other related concepts taught in other courses. More weight is placed on the qualitative understanding of fundamental concepts, like tonicity vs osmotic pressure, diffusion vs osmosis, crystalloids vs colloids, osmotic diuretics vs plasma expanders, rate of change vs rate constants, drug accumulation vs drug fluctuation, loading dose vs maintenance dose, body surface area (BSA) vs body weight (BW) as methods to adjust dosages, and much more, before considering other quantitative problems. In one more significant innovation, the origin and physical significance of all final forms of critical equations is always described in detail, thus, allowing recognition of the real application and limitations of an equation. Specific strategies are explained step-by-step in more than 100 practice examples taken from the fields of compounding pharmacy, pharmaceuticals, pharmacokinetics, pharmacology and medicine.

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