

076-023  
R 2.1  
SECOND EDITION

# Davis's Basic Math Review for Nursing and Health Professions

*with Step-by-Step Solutions*

Vicki Raines

DAVIS*Plus*  
**Plus Code**  
**INSIDE** ➔

Unlocks your online resources

616-083  
R 21

SECOND EDITION

Davis's  
**Basic Math Review**  
**For Nursing and**  
**Health Professions**  
*with Step-by-Step Solutions*

**Vicki Raines, BS, PTCB**

Learning Specialist, Educational Assistance Center  
Math Instructor, Adult Education  
Temple College  
Temple, Texas

457982

Universitatea de Stat de  
Medicină și Farmacie  
"Nicolae Testemițanu"  
"Școala Științifică de Medicină"

sl. 3



F.A. Davis Company • Philadelphia

# Contents

<b>part I</b>	<b>Basic Math Skills</b>	<b>1</b>
chapter 1	<b>Whole Numbers</b>	<b>1</b>
1.0	Pretest for Whole Numbers	1
1.1	Adding Whole Numbers	2
1.2	Subtracting Whole Numbers	4
1.3	Multiplying Whole Numbers	6
1.4	Dividing Whole Numbers	10
1.5	Chapter Test for Whole Numbers	15
chapter 2	<b>Fractions</b>	<b>17</b>
2.0	Pretest for Fractions	17
2.1	Fraction Terminology	18
2.2	Multiplying Fractions	24
2.3	Dividing Fractions	30
2.4	Finding the Least Common Denominator (LCD)	35
2.5	Adding Fractions	40
2.6	Subtracting Fractions	46
2.7	Chapter Test for Fractions	55
chapter 3	<b>Decimal Numbers</b>	<b>57</b>
3.0	Pretest for Decimal Numbers	57
3.1	Place Value	58
3.2	Rounding Decimal Numbers	61
3.3	Adding and Subtracting Decimal Numbers	64
3.4	Multiplying Decimal Numbers	68
3.5	Dividing Decimal Numbers	72
3.6	Converting Decimal Numbers and Fractions	77
3.7	Comparing Decimal Numbers and Fractions	81
3.8	Chapter Test for Decimal Numbers	85

<b>chapter 4</b>	<b>Percents, Ratios, and Proportions</b>	<b>87</b>
4.0	Pretest for Percents, Ratios, and Proportions	87
4.1	Ratios and Proportions	88
4.2	The Percent Proportion	93
4.3	Fractions, Ratios, and Percents	100
4.4	Working with Percents and Decimal Numbers	105
4.5	Fraction, Decimal, and Percent Table	110
4.6	Chapter Test for Percents, Ratios, and Proportions	113
<b>chapter 5</b>	<b>Positive and Negative Numbers</b>	<b>115</b>
5.0	Pretest for Positive and Negative Numbers	115
5.1	Adding Positive and Negative Numbers	116
5.2	Subtracting Positive and Negative Numbers	120
5.3	Multiplying and Dividing Positive and Negative Numbers	124
5.4	Collecting Like Terms	127
5.5	The Distributive Property	132
5.6	Chapter Test for Positive and Negative Numbers	135
<b>chapter 6</b>	<b>Equations</b>	<b>137</b>
6.0	Pretest for Equations	137
6.1	Solving Equations with Addition and Subtraction	138
6.2	Solving Equations by Multiplying and Dividing	142
6.3	Solving Two-Step Equations	148
6.4	Solving Equations When a Variable Occurs Multiple Times	155
6.5	Chapter Test for Equations	165
<b>part II</b>	<b>Practice Tests for Basic Math Skills</b>	<b>167</b>
practice test <b>1</b>	<b>Cumulative Skills Test</b>	<b>167</b>
practice test <b>2</b>	<b>Combined Skills Test</b>	<b>172</b>

<b>part III Measures Used in Health Care Applications</b>	<b>175</b>
<b>chapter 7 Household Measures</b>	<b>175</b>
7.0 Pretest for Household Measures	175
7.1 Household Measures for Length	176
7.2 Household Measures for Weight	180
7.3 Household Measures for Volume	184
7.4 Chapter Test for Household Measures	189
<b>chapter 8 The Metric System</b>	<b>191</b>
8.0 Pretest for the Metric System	191
8.1 Multiplication and Division by Powers of 10	192
8.2 Metric System Basics	197
8.3 Metric Units Used in Nursing	201
8.4 Converting Units in the Metric System	205
8.5 Chapter Test for the Metric System	211
<b>part IV Practice Tests for Measures</b>	<b>213</b>
<b>practice test 1 Basic Unit Conversions for Household and Metric Measures</b>	<b>213</b>
<b>practice test 2 Performing Household and Metric Conversions</b>	<b>215</b>
<b>Step-by-Step Solutions</b>	<b>219</b>
<b>appendix A: Roman Numerals</b>	<b>327</b>
<b>appendix B: Temperature Conversions</b>	<b>329</b>
<b>Index</b>	<b>335</b>