INDEX OF SELECTED TOPICS AND TOOLS

INDEX OF SELECTED TOPICS

To help you navigate through the course, we provide the following index for selected topics. For each topic we provide a listing of some of the lessons where it appears. At any particular time when teaching or planning your course, this can help you get a sense of what's coming next in a given strand and of what has come before. Topics that appear in one or two chapters only are not listed here. Look for them in the index to the textbook.

The lessons shown in **bold type** emphasize the given topic. Other lessons provide preview or review.

Abstract algebra: 3.11, 4.C, 5.12, 6.C

Arithmetic sequences: 1.11, 2.10, 5.B, **5.9-5.11**, 5.C

Averages: 5.11, 6.3, **6.10**, 8.1, 9.6, 9.C, **12.5**

Constant sum, product, difference, and ratio graphs: 4.1, **5.1, 5.2, 5.A**, 5.7, **6.B**, 10.1, 10.5, 11.7, 12.2, 12.3, 12.A, 13.1, 13.4

Direct and inverse variation: 3.12, 4.1, 4.2, **4.5, 4.6, 4.8, 4.9,** 5.2, 5.7, 6.B, 10.8, 11.3, 11.8, **12.3, 12.A**

Distributive law: 1.5, 1.9, 1.10, **2.3-2.A**, 3.3, 3.10, **5.3, 5.4, 5.7, 5.B**, 6.4, 6.5, 7.1, 7.3, 7.A, 7.7, 9.9

Exponential functions: 2.5, 5.C, 7.8, **8.5-8.B**, 8.11, 9.7, 9.8, 10.1

Exponents: 2.5, 7.8, 7.9-7.11, 7.C, **8.5-8.C**, 9.7, 9.8, 10.1

Factoring: 1.5, 1.10, 2.3, 2.4, 3.3, **5.4-5.6**, 6.6, **7.4, 7.5,** 7.7, 13.2, 13.3, 13.6, 14.3, 14.4

Fibonacci-like sequences: 1.8, **2.6**, 11.7, 14.8

Fitting a line to data: 4.7, 8.1, 10.B, **12.2**

Fractions, and algebraic fractions: 3.7, 3.B, 3.12, 5.3, 6.8-6.10, 8.6, 8.10, 9.8, 9.9, 9.11, **11.2, 11.3**, 11.8, 13.B, **14.2, 14.3**, 14.A, 14.B

Geometric sequences: 2.5, 5.C, 7.8, 8.5, 8.6, **11.1, 11.2**, 11.A

Graphical solution of equations and inequalities: 4.8, 6.2, **6.4, 6.5**, 7.6-7.8, 10.1, 10.5, **10.6**, 12.5, 13.1-13.3

Identities: 1.4, 5.7, 6.4, **7.1-7.4, 7.5**, 9.9

Inequalities: 3.5, 3.11, 6.1, 6.2, 6.4, 6.A, 6.5, 6.12, 7.B, 8.7, 14.5

Like terms: 1.6, **1.7, 1.10**, 2.2, 2.3, 2.A, 7.A

Linear equations: 2.7, 2.10, 3.7, 3.9, **6.3-6.6, 6.8, 6.9**, 7.6, 8.7, 8.8, 12.4

Linear functions: 1.7, 2.7, 2.9, 2.10, 3.A, 3.8, 3.10, 4.5, 5.C, 6.1, 6.A, 6.6, 6.B, **8.1-8.A, 8.7-8.B**, 9.6, 12.1, 12.4, 12.A, 12.8

Line (Finding the equation of a): 8.4, **10.5, 10.8, 10.B**, 12.1, 12.2

Minus: 2.1, 2.2, 2.4, 3.3, 3.5, 3.6, 3.12, 5.4, 5.7, 7.3, 7.4

Opposites and reciprocals: 1.3, **2.1**, 2.2, 3.3, **3.7**, 3.B, 3.9-3.11, 4.C, 5.12, 6.4, 6.12, 6.C, 8.11, 8.12, 9.12, 12.C

Order of operations: 1.9, 2.A, 2.5, 3.5, **4.3**, 5.7, 5.B, 6.9, 7.1, 7.8, 8.11

Quadratic functions and equations: 1.1, 2.A, 5.C, 6.5, 7.2, 7.6, 7.7, 7.B, **13.1-13.B, 14.4-14.7**

Ratio and proportion: 3.12, 4.5, 4.8, 6.7, 6.9-6.11, 7.11, 8.3, 8.5, 8.6, 8.10, 8.11, 9.7, 9.10, 9.12, 9.C, 10.1, 11.1, 11.6, 11.8, 12.3, 12.A, 14.1, 14.8

Scientific notation: 7.8, **7.9-7.C**, 8.6, 8.8, 8.11-8.C, 9.4

Similarity: 3.12, 4.2, 4.5, 7.2, 9.6, **9.10-9.C**

Simultaneous equations: 2.7, 5.4, 6.8, 7.6, **10.1-10.A, 10.6-10.B**, 12.8, 13.B

Slope and rate of change: 2.9, 3.8, 4.4, 4.5, 4.8, 4.11, 5.C, 6.B, **8.1-8.A, 8.8, 8.9**, 9.2, 9.A, 9.C, 10.3, 10.6, 10.8, 11.3, 12.A, 12.5, 12.8

Square Roots: 5.2, 5.7, 6.12, 7.8, **7.12, 9.1-9.5, 9.7-9.9**, 9.C, 11.4, 11.A, 12.B, 14.1

Substituting numbers into expressions: 1.4, **1.9**, 3.5, 6.4, 6.5, 7.3, 8.9

INDEX OF SELECTED TOOLS

While the Lab Gear, Cartesian graphing, and tables of values are used repeatedly in almost every chapter, the following two tools are used only sporadically. Since these tools play an essential role in the development of key ideas, you may want to use these lists as a reference.

Function diagrams: 2.7-2.9, 3.2, 3.10, 3.C, 5.1, 5.7, **8.2**, 9.5, 12.7, **12.8**

Geoboards and dot paper: 1.12, 2.12, 3.12, 4.12, 5.12, 6.12, 7.12, 8.3, 9.2-9.A, 9.9, 9.C, 11.2, 11.3, 11.A