

Scope & Sequence for Teaching Textbooks Math 3 - Math 7

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Whole Numbers	✓	✓	✓	✓	✓
Represent numbers in different forms	✓	✓	✓	✓	✓
Roman Numerals		✓	✓		✓
Tally marks		✓	✓		
Expanded Form	✓				✓
Writing numbers in words	✓	✓	✓	✓	✓
Translate words to digits	✓	✓	✓	✓	✓
Number lines	✓	✓	✓	✓	✓
Place value system	✓	✓	✓	✓	✓
Ones and tens places	✓	✓	✓	✓	✓
Hundreds place	✓	✓	✓	✓	✓
Thousands place	✓	✓	✓	✓	✓
To 10,000s	✓	✓	✓	✓	✓
To 100,000s	✓	✓	✓	✓	✓
To millions		✓	✓	✓	✓
To hundred millions		✓	✓	✓	✓
To hundred billions				✓	
Compare and order whole numbers	✓	✓	✓	✓	✓
Comparison symbols	✓	✓	✓	✓	✓
Whole #s to 999	✓	✓	✓	✓	✓
Whole #s to 100,000s			✓	✓	✓
Whole #s to 100 millions				✓	✓
Make largest number given 3 digits	✓				
Order numbers from least to greatest or greatest to least		✓	✓	✓	✓
Compare on a number line	✓	✓	✓	✓	✓
Ordinal numbers	✓	✓			
Compare money amounts	✓				
Addition	✓	✓	✓	✓	✓
Addends, sum defined	✓	✓	✓	✓	✓
Addition Basic facts	✓	✓	✓	✓	
Long Addition	✓	✓	✓	✓	✓
With 2- or 3-digit numbers	✓	✓	✓	✓	✓
Carrying	✓	✓	✓	✓	✓
With dollars & cents	✓	✓	✓	✓	✓
With 4(or more)-digit numbers			✓	✓	✓
With 3 or more numbers	✓	✓	✓	✓	✓
Adding multiples of 10 and 100	✓	✓		✓	✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Addition Missing number probs	✓	✓	✓	✓	✓
Add 3 or more numbers	✓	✓	✓	✓	✓
Addition word problems	✓	✓	✓	✓	✓
Addition on a number line	✓				
Subtraction	✓	✓	✓	✓	✓
Difference defined	✓	✓	✓	✓	✓
Subtraction Basic facts	✓	✓	✓	✓	
Long Subtraction	✓	✓	✓	✓	✓
Borrowing/regrouping	✓	✓	✓	✓	✓
With dollars & cents	✓	✓	✓	✓	✓
With 2- or 3-digit numbers	✓	✓	✓	✓	✓
With 4-digit numbers			✓	✓	✓
Regrouping twice	✓	✓	✓	✓	✓
Regrouping with zeros		✓	✓	✓	✓
Subtracting multiples of 10	✓	✓		✓	✓
Subtraction Missing number probs	✓	✓	✓	✓	✓
Subtraction Word Problems	✓	✓	✓	✓	✓
Subtraction on a number line	✓			✓	
Multiplication	✓	✓	✓	✓	✓
Represent Multiplication	✓	✓	✓	✓	✓
Factors, Product defined	✓	✓	✓	✓	✓
Multiplication Basic facts	✓	✓	✓	✓	✓
Multiplication Table (12 x 12)	✓	✓	✓		✓
Multiply by 10	✓	✓	✓	✓	✓
Multiply by 100 or 1,000 in your head	✓	✓	✓	✓	✓
Multiply by a multiple of 10, 100, or 1,000 in your head	✓	✓	✓	✓	✓
Multiply w. both nos. ending in zeros		✓		✓	✓
Multiply by skip-counting	✓	✓	✓		✓
Multiples	✓	✓	✓	✓	✓
Long Multiplication	✓	✓	✓	✓	✓
With carrying	✓	✓	✓	✓	✓
By 2-digit number		✓	✓	✓	✓
By 3-digit number			✓	✓	✓
Two 2-digit numbers		✓	✓	✓	✓
Multiplying 3 or more numbers	✓	✓	✓	✓	✓
Multiplication Missing number probs			✓	✓	✓
Multiplication Word problems	✓	✓	✓	✓	✓
Multiplication on a number line	✓				
Division	✓	✓	✓	✓	✓
Represent division	✓	✓	✓	✓	✓
Dividend, Divisor, Quotient defined	✓	✓	✓	✓	✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Division sign, div. box, or fraction bar	✓	✓	✓	✓	✓
Division Basic facts	✓	✓	✓		✓
Divide using mult. facts or mult. table	✓	✓	✓	✓	✓
Long Division		✓	✓	✓	✓
with a remainder		✓	✓	✓	✓
2-digit answer		✓	✓	✓	✓
3-digit answer or more		✓	✓	✓	✓
2-digit divisor			✓	✓	✓
0s in quotient			✓	✓	✓
Dividing numbers that end in 0			✓	✓	✓
Write remainder as a fraction		✓	✓	✓	✓
Division Missing number probs		✓			✓
Division Word problems	✓	✓	✓	✓	✓
Mental Math	✓	✓	✓	✓	✓
Fact families	✓	✓	✓	✓	
Word problems on whole no. operations	✓	✓	✓	✓	✓
Counting numbers			✓	✓	
Whole numbers	✓	✓	✓	✓	✓
Odd and Even Numbers	✓	✓	✓	✓	✓
Number patterns		✓	✓	✓	
Dozen and half dozen	✓				
Divisibility rules					✓
Factoring a number	✓			✓	✓
Prime Numbers	✓			✓	✓
Prime Factorization					✓
Greatest Common Factor				✓	✓
Least Common Multiple/Denominator				✓	✓
Properties of numbers	✓	✓	✓	✓	✓
Associative property of addition	✓	✓	✓	✓	✓
Associative property of multiplication	✓	✓	✓	✓	✓
Commutative property of addition	✓	✓	✓	✓	✓
Commutative property of multiplication	✓	✓	✓	✓	✓
Identity property of addition	✓	✓	✓		✓
Identity property of multiplication	✓	✓	✓	✓	✓
Identity property of division	✓		✓	✓	✓
Zero property of multiplication	✓	✓	✓	✓	✓
Zero property of division	✓		✓	✓	✓
Division by zero forbidden/undefined	✓		✓	✓	✓
Inverse operations	✓	✓	✓	✓	✓
Rounding numbers	✓	✓	✓	✓	✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Estimating	✓	✓	✓	✓	✓
Fractions	✓	✓	✓	✓	✓
Part of a whole	✓	✓	✓	✓	✓
Part of a group	✓	✓	✓	✓	✓
Fraction, numerator, denominator defined	✓	✓	✓	✓	✓
0 numerator = 0; 0 denom. = undefined	✓				✓
Operations with fractions	✓	✓	✓	✓	✓
Addition with like denominators	✓	✓	✓	✓	✓
Subtraction with like denominators	✓	✓	✓	✓	✓
Addition with different denominators – change one denom.			✓	✓	✓
Addition with different denominators – change both denom.					✓
Subtraction with different denominators – change one denom.			✓	✓	✓
Subtraction with different denominators – change both denom.					✓
Add/Subtract fractions by finding LCD					✓
Add/Subtract more than 2 fractions			✓	✓	✓
Multiply Fractions				✓	✓
Divide Fractions / Reciprocals				✓	✓
Word problems with fractions			✓	✓	✓
Fractions represented on number line		✓	✓	✓	✓
Comparing fractions	✓		✓	✓	✓
Equivalent fractions		✓	✓	✓	✓
Reducing fractions		✓	✓	✓	✓
Factoring & canceling in fractions					✓
Mixed numbers	✓	✓	✓	✓	✓
Add/subtract mixed nos. – same denoms.			✓	✓	✓
Add/subtract mixed nos., fractions, whole nos. together				✓	
Add/subtract mixed nos. – diff. denoms.					✓
Multiply/Divide mixed numbers				✓	✓
Proper/Improper fractions		✓	✓	✓	✓
Convert bet. improper fracs. & mixed nos.		✓	✓	✓	✓
Decimals	✓	✓	✓	✓	✓
Expanded notation		✓	✓		✓
Tenths and hundredths		✓	✓	✓	✓
Thousandths			✓	✓	✓
Ten-thousandths					✓
Decimal point in money	✓	✓	✓	✓	✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Convert decimals & fractions		✓	✓	✓	✓
Decimals in words		✓	✓	✓	✓
Operations with decimals		✓	✓	✓	✓
Adding and Subtracting Decimals		✓	✓	✓	✓
Multiplying decimals			✓	✓	✓
Long division with decimals			✓	✓	✓
Mult./Div. decimals by 10, 100, 1,000			✓	✓	✓
Insert or delete 0s in decimals				✓	✓
Multiplying decimals in real world			✓	✓	✓
Decimal Remainders			✓	✓	✓
Convert bet. fractions & decimals		✓	✓	✓	✓
Dividing decimals in real world			✓	✓	✓
Repeating decimals					✓
Comparing decimals			✓	✓	
Rounding & estimating decimals				✓	✓
Hours & minutes to decimal form					✓
Money	✓	✓	✓	✓	✓
Paper money	✓				
As a place value model	✓				
Dollar sign	✓	✓	✓	✓	
Writing money with \$ & Decimal point	✓	✓	✓	✓	
Coins	✓	✓			
Cent sign	✓	✓	✓	✓	
Adding coins	✓	✓			
Using the fewest number of coins		✓			
Money word problems (add/subtract)	✓	✓	✓	✓	✓
Making change	✓	✓	✓	✓	
Comparing money amounts	✓			✓	
Adding dollars and cents	✓	✓	✓	✓	✓
Subtracting dollars and cents	✓	✓	✓	✓	✓
Multiply and divide money amounts		✓	✓	✓	✓
Writing a check		✓			✓
Recording checks and deposits		✓			✓
Percents	✓	✓	✓	✓	✓
Define percent	✓	✓	✓	✓	✓
Represent percent visually	✓	✓	✓	✓	
Convert between fractions and percents		✓	✓	✓	✓
Convert between decimals and percents		✓		✓	✓
Finding percent of a number		✓		✓	✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Fractional percents					✓
Application of %s - interest				✓	✓
Application of %s - grades				✓	
Application of %s - commissions					✓
Application of %s – sales tax					✓
Application of %s – profit margin					✓
Exponents and Powers					✓
Defs. of Powers, exponent, base					✓
Squares and cubes					✓
Exponent of 1 or 0					✓
Expanded notation with exponents					✓
Roots					✓
Square roots					✓
Order of Operations				✓	✓
With Parentheses				✓	✓
With Fraction bars					✓
Negative Numbers		✓		✓	✓
Defined		✓		✓	✓
Negative numbers on the number line				✓	✓
Negative numbers on a thermometer		✓		✓	✓
Negative numbers on coordinate plane					✓
Adding and Subtracting Negative numbers				✓	✓
Multiplying and Dividing Negative nos.					✓
Opposites				✓	✓
Units of Measure	✓	✓	✓	✓	✓
Length (US Cust.)	✓	✓	✓	✓	✓
Using a ruler	✓	✓		✓	
Mass/Weight (US Cust.)			✓	✓	✓
Volume/Capacity (US Cust.)	✓		✓	✓	✓
Using a measuring cup	✓				
Length (Metric)	✓	✓	✓	✓	✓
Mass/Weight (Metric)			✓	✓	
Volume/Capacity (Metric)			✓	✓	✓
Unit Conversions		✓	✓	✓	✓
Area	✓	✓	✓	✓	✓
By counting squares	✓	✓	✓	✓	✓
By multiplying	✓	✓	✓	✓	✓
Volume					✓
By counting cubes					✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
By multiplying					✓
Angle measure (Degrees)		✓			✓
Using a protractor		✓			✓
Time	✓	✓	✓	✓	✓
Seconds		✓	✓	✓	✓
Minutes	✓	✓	✓	✓	✓
Hours	✓	✓	✓	✓	✓
A.M., P.M., Noon, Midnight	✓	✓	✓	✓	
Days	✓	✓	✓	✓	
Weeks, Months, Years	✓	✓	✓	✓	
Decade, Century			✓	✓	
Leap Year		✓	✓	✓	
Reading a Calendar		✓	✓	✓	
Writing the date		✓		✓	
Seasons		✓			
Digital clocks	✓	✓	✓	✓	
Reading and writing times	✓	✓	✓	✓	
Converting times		✓	✓	✓	✓
Time Zones		✓			
Clocks with hands	✓	✓	✓	✓	
Adding or subtracting times					✓
Convert hrs. and min. to decimal hrs.					✓
Find elapsed time		✓			
Temperature (F)	✓	✓		✓	✓
Reading a thermometer	✓	✓		✓	
Negative temperatures		✓		✓	✓
Computer memory (Megabyte, etc.)					✓
Maps	✓	✓			
Directions on a map	✓				
Read a scale on a map		✓			
Algebra Concepts	✓	✓	✓	✓	✓
Missing number problems	✓	✓	✓	✓	✓
Using x for unknowns					✓
Equations			✓	✓	✓
Inverse operations and undoing	✓				✓
Golden rule of algebra					✓
Solving simple equations (1 operation)			✓	✓	✓
Ratios				✓	✓
Proportions					✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Cross-Multiplying					✓
Inequalities	✓	✓	✓	✓	✓
Greater (or less) than or equal to symbol	✓	✓	✓	✓	✓
Solving inequalities					✓
Graphing inequalities on number line					✓
Graphing Concepts	✓	✓			✓
Number line	✓	✓	✓	✓	✓
Coordinate plane					✓
Graphing points, ordered pairs					✓
Quadrants					✓
Word problems	✓	✓	✓	✓	✓
Real World Applications	✓	✓	✓	✓	✓
Fraction problems					✓
Percent problems					✓
Ratio problems					✓
Application lessons:					
Add, Subt., Mult., Div. Word Probs.	✓				
Money Problems (Add, subtract)	✓				
Making Change	✓				
Finding Area	✓				
Reading Clocks (Digital & w. hands)	✓				
Rulers, Yardsticks, Tape Measures	✓				
Reading a Thermometer	✓				
Understanding Directions on a Map	✓				
Reading a Calendar		✓			
Writing the Date		✓			
Seasons		✓			
Add, Subt., Mult., Div. Word Probs.		✓			
Telling Time		✓			
Reading an Old-Fashioned Clock		✓			
Multiplication Word Problems		✓			
Making Change		✓			
Writing a Check		✓			
Recording Checks and Deposits		✓			
Reading a Scale on a Map		✓			
Multiplying & Dividing Money Amts.		✓			
Adding & Subtracting Word Problems			✓		
Simple Two-Step Word Problems			✓		
Dollars, Cents, and Decimals			✓		

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Money Word Problems 1, 2, & 3			✓		
More Division Word Problems			✓		
Division Word Probs. w. Remainder			✓		
Dividing w. Decimals in Real World			✓		
Laminating a Countertop				✓	
Model Ships				✓	
Completing the Whole				✓	
Planning a Wedding				✓	
Your Weight on the Moon				✓	
Estimating Project Times				✓	
Comparison Shopping				✓	
Credit Cards				✓	
Measuring with a Ruler				✓	
Temperature on a Thermometer				✓	
Eating Right (+ & – calories)					✓
Quilting (× & ÷ lengths)					✓
Income Taxes (gross, net income)					✓
Computer Hard Drives (bytes, MB,GB)					✓
Buying a Car (loans, down pymt., int.)					✓
Clearance Sale (fraction of a no.)					✓
Ratios and Recipes					✓
Advertising (fraction of a no.)					✓
Carpentry (mult. fracs/mixed nos.)					✓
Checking Accounts (add/subt. dec.)					✓
Hours and Minutes (to dec. form)					✓
Stock Prices (mult. decimals)					✓
Using a Calculator (operate w dec.)					✓
Sales Commissions (mult. by %)					✓
Profit Margins (% of a no.)					✓
A Trip to the Bank (compound int.)					✓
What's the Sales Tax Rate?					✓
Geometry Concepts	✓	✓	✓	✓	✓
Venn Diagrams		✓			
Points	✓	✓	✓	✓	✓
Planes					✓
Lines and line segments	✓	✓	✓	✓	✓
Horizontal, vertical	✓	✓	✓	✓	
Oblique	✓	✓			
Rays	✓	✓			✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Angles, sides, naming angles	✓	✓	✓	✓	✓
Vertex of angle	✓	✓	✓	✓	✓
Right angle	✓	✓	✓	✓	✓
Acute, Obtuse angles		✓	✓	✓	✓
Straight angle		✓			✓
Angle measure, degrees		✓			✓
Adjacent, vertical angles					✓
Parallel, Perpendicular lines		✓	✓	✓	✓
Polygons			✓	✓	✓
Triangles	✓	✓	✓	✓	✓
Types of triangles (by side)		✓	✓		✓
Types of triangles (by angle)		✓	✓	✓	✓
Sum of angles = 180					✓
Congruent, similar triangles		✓			✓
Pythagorean Theorem					✓
Finding sides with Pythag. Theorem					✓
Quadrilaterals	✓	✓	✓	✓	✓
Rectangle	✓	✓	✓	✓	✓
Square	✓	✓	✓	✓	✓
Trapezoid		✓	✓		✓
Parallelogram		✓	✓		✓
Rhombus			✓		✓
Pentagon, Hexagon, Octagon			✓	✓	
Circles	✓	✓	✓	✓	✓
Radius	✓	✓	✓	✓	✓
Diameter		✓	✓	✓	✓
Chord					✓
Circumference		✓	✓	✓	✓
π					✓
Area of a Circle					✓
Perimeter	✓	✓	✓	✓	✓
Area	✓	✓	✓	✓	✓
Area of a Rectangle	✓	✓	✓	✓	✓
Area of a Parallelogram					✓
Base and Altitude					✓
Area of a Triangle					✓
Area of combined/complex figures		✓			✓
Area of a circle					✓
Congruent figures		✓			✓
Similar figures		✓			✓

Topic Sub-Topic	Math 3	Math 4	Math 5	Math 6	Math 7
Symmetry		✓			
Solid figures				✓	✓
Faces				✓	✓
Edges, Vertices					✓
Prism					✓
Cube				✓	✓
Rectangular Prism/Solid				✓	✓
Pyramid				✓	✓
Cylinder				✓	✓
Cone				✓	
Sphere				✓	✓
Volume of solid figures					✓
Volume of a Prism					✓
Data and Statistics	✓	✓	✓		✓
Represent data	✓	✓			✓
Measures of Center			✓		✓
Average (Mean)			✓		✓
Median					✓
Mode					✓
Measures of Dispersion					✓
Range					✓
Box and Whisker Plots					✓
Histograms					✓
Pictographs	✓	✓			
Bar Graphs	✓	✓		✓	✓
Line Graphs	✓			✓	✓
Circle Graphs				✓	✓
Surveys			✓	✓	✓
Samples, population, random sample			✓		✓
Probability		✓		✓	✓
Calculating simple probability		✓		✓	✓
Theoretical probability					✓
Experimental probability					✓
Probability of multiple events					✓
Independent events					✓
Sequences		✓	✓	✓	