

List of Published Math Intervention Programs and Assessments for Middle Grades

Important Note: We are providing this list as a resource. The *Strengthening Mathematics Intervention* (SMI) project does *not* endorse or recommend any specific programs.

This list is not exhaustive and is a work in progress. If you are familiar with additional mathematics intervention programs and assessments, please send the names to abrodesky@edc.org. We will periodically update this list.

I. Mathematics Intervention Programs

A. Print Programs (Listed alphabetically)

[Bridges Intervention](#): designed for Tier 2 interventions; addresses key numeracy and computation skills and concepts for K-5

[Do the Math Now](#): intervention curriculum by Marilyn Burns. Two units for the middle grades: Multiplication and Division and Fraction Focus

[Gap-Closing Units](#): intervention units developed by Marian Small (Ministry of Education Ontario) that you can download for free. Select “Number Sense/Junior English” and “Intermediate Senior English” and then select units on different topics, such as Fractions, Integers, etc.

[Mathematics Navigator Common Core](#): targeted intervention programs for grades 1-8. It has a [free screening tool](#) for misconceptions that you can sign up for.

[MathLinks Essentials](#): intervention modules that focus on the major topics of middle school mathematics. Its primary goal is to make content accessible to students in need of intervention, English learners, and students with disabilities.

[Math Pathways and Pitfalls](#) (West ED): intervention curriculum that has an emphasis on building academic language. The grades 4-8 units focus on rational number conceptions and operations, ratios and proportions with algebraic reasoning woven throughout.

[SOAR Mathematics Intervention](#) (grades 1-8) from Institute for Learning, University of Pittsburgh

[Transition to Algebra](#) (EDC): program that focuses on Algebra 1 content to support struggling math learners. Instead of reteaching the same algebra curriculum in the same way to struggling students, *Transition to Algebra* uses logic puzzles, problems, and explorations to help teachers build students' mathematical ways of thinking.

B. Technology-based or Blended Intervention Programs (Listed alphabetically)

[AchieveMath Intervention Program](#): blended learning program that includes small group instruction.

[Aleks](#) (McGraw Hill): Adaptive K-12 online program that uses open response questions.

[Ascend Mathematics](#): Online intervention program that includes video instruction and assessments.

[Dreambox](#): Online math learning with adaptive features, games and assessments.

[i-ready](#): Adaptive, diagnostic assessments and personalized instruction.

[I can learn Pre-algebra and Algebra](#): online learning that includes video instruction

[Math 180](#): Blended learning model combines whole class activities with individualized software activities. For grades 5 and up.

[Mathlia](#) from Carnegie Learning: online program for grades 6-12, includes formative assessment, adaptive instruction

[TransMath](#) (Voyager Sopris) Blended intervention program that has an online-only option for students in grades 1-8. From Voyager Sopris.

C. Resources for Building Fluency with Math Facts

- [Fluency without Fear: Research Evidence on Best Ways to Learn Math Facts](#) Jo Boaler, youcubed.org
- [Reflect Math](#): online program for fact fluency

II. Websites with Mathematics Tasks and Apps

There are many websites with engaging mathematics tasks, activities and apps that can be used as resources for creating lessons in intervention classes. This is not an exhaustive list. Most of the links below are for free resources.

- [Algebra by Example](#)
- [Desmos](#)
- [Estimation 180](#)
- [Illustrative Mathematics](#)
- [NCTM Illuminations](#)
- [Inside Mathematics](#)
- [Mathalicious](#)
- [Math Assessment Project](#)
- [Numberless Word Problems](#)

- [Open Middle Problems](#)
- [Open Up Resources](#)
- [Poster Problems](#) (SERP)
- [Problem Based Lessons](#) (Robert Kaplinsky)
- Rational Number Project: [Initial Fraction Ideas Curriculum](#) and [Fraction Operations and Initial Decimal Ideas](#)
- [Routines for Reasoning](#)
- [Three-Act Math Tasks](#) (Dan Meyers)
- [Youcubed](#)
- [Yummymath](#)

Math Apps

- [Interactivate Math Apps](#)
- [National Library of Virtual Manipulatives](#)
- [NCTM Illuminations: Interactives](#)
- [Number Line App](#) and other [Apps](#) from the Math Learning Center
- [SolveMe Puzzles](#) from Transition to Algebra
- [Thinking Blocks](#)

III. Assessment, Screening and Progress Monitoring Tools

[Aimsweb](#): M-CAP assessment for grades K-8 focuses on problem-solving (see sample page for [Grade 8](#)) and [M-COMP](#) focuses on computation (see sample page for [Grade 6](#)).

[Algebra Progress Monitoring](#): short progress-monitoring assessments for pre-algebra and Algebra 1 topics developed by researchers at Iowa State University and Clemson University

[ANET](#) (Achievement Network)– Interim Assessments

[CBMath](#): Curriculum based measurement assessment that have screening and progress-monitoring tools

Background Information on Curriculum Based Measurement

<https://my.vanderbilt.edu/specialeducationinduction/files/2013/07/IA.Math-CBM.pdf>

[Diagnostic Probes](#): short probes for uncovering students' mathematics strengths, misconceptions and difficulties. The probes be used as paper-pencil items, card sorts and for student interviews. Example probes and resources can be downloaded for free.

[DibelsMath](#) (K-6): Assessment tool that has measures of early numeracy, computation, and problem solving.

[Gmade](#): Diagnostic assessment

[iReady](#): Diagnostic assessment

[Let's Go Learn](#): Adaptive diagnostic assessment of mathematics K-7 and Pre-algebra

MAP (Measure of Academic Progress): Adaptive assessment for mathematics (g. 2-12)

[Mastery Connect](#): Assessment tools

[Math Reasoning Inventory](#) (Marilyn Burns) an online formative assessment tool with questions for interviewing students and resources (free)

[Path Driver for Math](#): Online universal screening and progress monitoring

[Star Math \(Renaissance\)](#): Computer adaptive-assessment

IV. Research Reports and Resources

A. Practice Guides from Institute for Education Sciences (IES)

- [Assisting Students Struggling with Mathematics: Response to Intervention \(RtI for Elementary and Middle Schools\)](#)
- [Developing Effective Fractions Instruction](#) in Kindergarten through 8th Grade
- [Teaching Strategies for Improving Algebra Knowledge in Middle and High School Students](#)

B. Resources for Setting Content Priorities from Achieve the Core

- [Mathematics Focus by Grade Level](#)
- Blog Post: [Select Math Intervention Content](#)

C. Reports and Resources on RTI/MTSS

- [RtI in Middle Schools: The Essential Components](#)
- [RtI in Middle Schools: FAQs](#)
- [RtI Implementation Processes for Middle Schools](#)
- [RtI Scheduling Processes for Middle Schools](#)
- Module from the IRIS Center on [MTSS/RTI: Mathematics](#)
- [Middle School Matters](#): Instructional Toolkit for Mathematics from the Meadows Center for Preventing Educational Risk