

## **Dimensions Math (7 & 8)**

### **Methodology:**

Challenging series from a country with a proven track record in math education.

-Integrates pre-algebra, algebra, and geometry and includes some trigonometry and advanced math topics. --Concepts were added to an existing curriculum that follows the Singapore Framework and philosophy to align it with Common Core Standards, resulting in an advanced (above grade level) curriculum.

-Lessons include "class activities" with an inquiry/discovery based approach

-Most questions require students to apply knowledge to new situations rather than following a procedure or pattern which allows students to gain more depth of knowledge by reasoning through them and applying concepts in new ways.

-Little review is included in this text

-Mastery of topics introduced in earlier years is expected

-Parent (teacher) involvement is generally required

-Discussion of topics with someone knowledgeable is encouraged (parent/teacher or tutor)

We recommend this curriculum for students who...

-Are strong in math and are looking for something advanced/challenging

-Have a parent that is confident in teaching advanced math concepts (topics generally expected in HS math), OR

-Will work with a math tutor

### **Visuals:**

6 sample pages showing different elements of the presentation of the text (from 8A text)

INTRO TO CHAPTER: [http://www.singaporemath.com/v/vspfiles/assets/images/sp\\_dmt8a1.pdf](http://www.singaporemath.com/v/vspfiles/assets/images/sp_dmt8a1.pdf)

LESSON: [http://www.singaporemath.com/v/vspfiles/assets/images/sp\\_dmt8a2.pdf](http://www.singaporemath.com/v/vspfiles/assets/images/sp_dmt8a2.pdf)

EXAMPLE and "Try-It": [http://www.singaporemath.com/v/vspfiles/assets/images/sp\\_dmt8a3.pdf](http://www.singaporemath.com/v/vspfiles/assets/images/sp_dmt8a3.pdf)

MATHWORK AND BRAINWORK:

[http://www.singaporemath.com/v/vspfiles/assets/images/sp\\_dmt8a5.pdf](http://www.singaporemath.com/v/vspfiles/assets/images/sp_dmt8a5.pdf)

IN A NUTSHELL: [http://www.singaporemath.com/v/vspfiles/assets/images/sp\\_dmt8a7.pdf](http://www.singaporemath.com/v/vspfiles/assets/images/sp_dmt8a7.pdf)

EXTENSION & JOURNAL WRITING:

[http://www.singaporemath.com/v/vspfiles/assets/images/sp\\_dmt8a9.pdf](http://www.singaporemath.com/v/vspfiles/assets/images/sp_dmt8a9.pdf)

### **Components:**

2 Textbooks: REQUIRED (A & B - 1 per semester); answers to most problems in back

2 Teaching Notes and Solutions Manuals: HIGHLY RECOMMENDED (A & B - one per semester); BRIEF teaching notes (NOT full on teacher's guide!); Fully worked solutions to ALL problems

2 Workbooks: OPTIONAL (A and B - one per semester); Can be used for review or Test questions (there is NOT space to work in the book, so name "workbook" is misnomer).

2 Workbook Solutions Manuals: OPTIONAL (but highly recommended if you order the Workbook) (A and B - one per semester)

Geometer's Sketchpad: REQUIRED to complete many "Class Activities (the Free App Geogebra can be used instead. Mechanics are different, so cannot follow instructions exactly. Would need to be comfortable with technology.) One of these tools is vital to the discovery-based inquiry.

Algebra Tiles Recommended for kinesthetic learners.