

# The Common Denominator

A Family Math Newsletter  
Geometry Unit 7: Polygons and Quadrilaterals

## Unit at a Glance



After an in-depth study of triangles, students now begin to look at quadrilaterals. This unit develops the properties of parallelograms, kites, and trapezoids as the students continue to enhance the skills of writing a formal geometric proof. The following topics will be studied:

Topic	Length	Geometry Textbook Section(s)
Topic A: Properties and Attributes of Polygons	Academic: 1.5 (90-minute) lessons Honors: 1.5 (90-minute) lessons	6.1
Topic B: Properties of Parallelograms and Special Parallelograms	Academic: 2 (90-minute) lessons Honors: 2 (90-minute) lessons	6.2, 6.4
Topic C: Conditions for Parallelograms and Special Parallelograms	Academic: 2 (90-minute) lessons Honors: 2 (90-minute) lessons	6.3, 6.5
Topic D: Properties of Kites and Trapezoids	Academic: 1 (90-minute) lesson Honors: 2 (90-minute) lessons	6.6

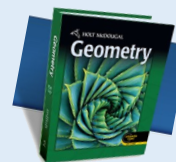
## Resource Toolkit

### Homework Help

Digital resources exist in the HMH online textbook that can support student learning outside of the classroom. To access these resources, students can log into HMH through BCPS One Digital Content, then select “Student Resources”. The “Homework Helper” resource has a mini-lesson, then guided practice problems for students to complete that can help reinforce concepts that were learned in class. Also, check the “Videos & Activities” section where other beneficial resources can be found.

### Khan Academy Videos

- Topic A: [Sum of the Interior Angles of a Polygon](#)
- Topic B: [Proof: Diagonals of a Rhombus Are Perpendicular Bisectors](#)
- Topic C: [Proof: Diagonals of a Parallelogram](#),
- Topic D: [Kites as Geometric Figures](#)



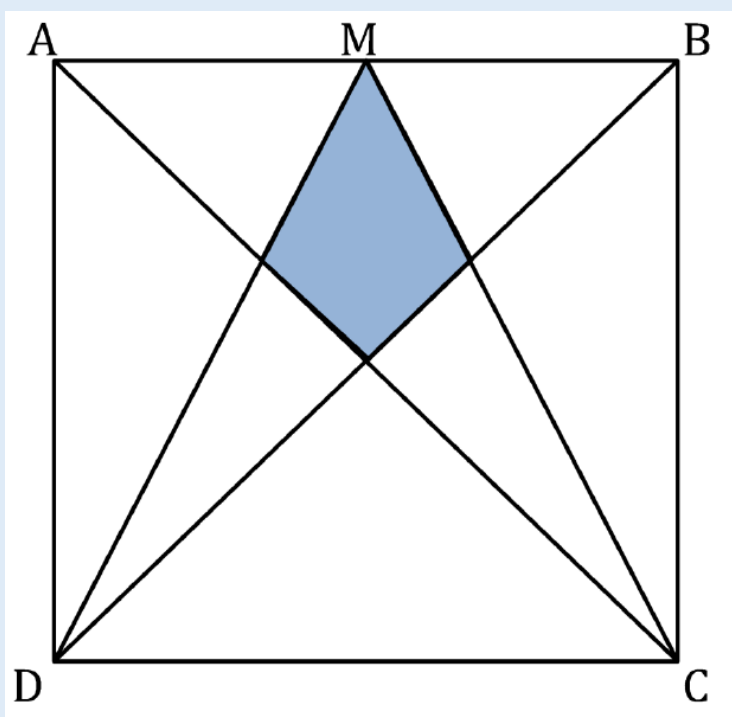
## Exploring Mathematics

### *Real World Applications*

Ask your student to classify objects using [the hierarchy of quadrilaterals](#). Some examples of objects to classify include dollar bills, street signs, picture frames, etc. Extend classifying quadrilaterals by play the [Quadrilateral Shape Splat Geometry Game](#).

### *Extension Task!*

With your child, work through the [Kite in a Square Task](#). Discuss problem solving strategies and possible solution paths. Click [here](#) for the solution.



“Once you replace the negative thoughts with positive ones, you’ll start having positive results.”

– Willie Nelson