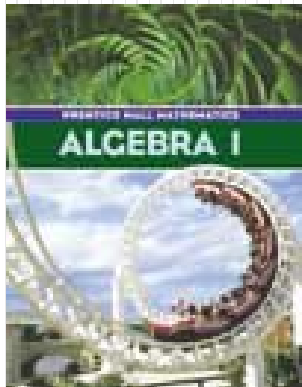




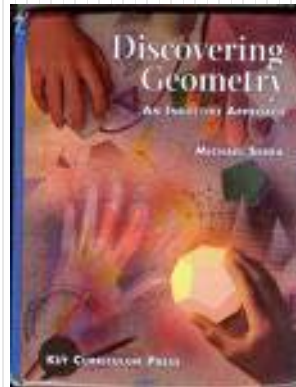
Mr. Northcutt's Math Classes Class Presentation



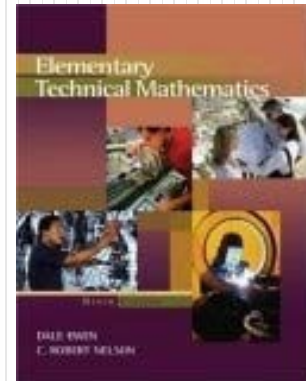
December 18, 2008 (71)



Math 1



Math 2



Applied Math



Math 1 – Daily Summary

- **Announcements**

- Origami until Christmas Break (pending test outcome)

- **Class Objectives**

- Chapter 8 Retest
 - Show me any past due HW after test is completed!

- **Assignment**

- NO HW

1. Take Your Time – Not a Race
2. Check Your Answers



Math 2 – Daily Summary

- **Announcements**

- **TEST on Chapter 6 Tomorrow**
- Origami on Monday & Tuesday Next Week

- **Class Objectives**

- Chapter 6 Review

- **Assignment**

- Sample Test (*I have Key if you want to check answers*)

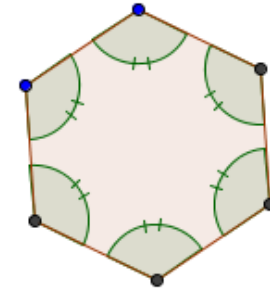
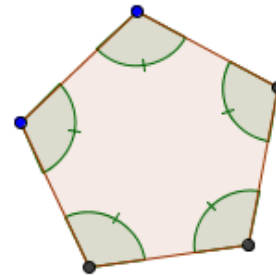


Polygon Interior & Exterior Angles

- The sum of the measures of the n interior angles of an n -gon is:

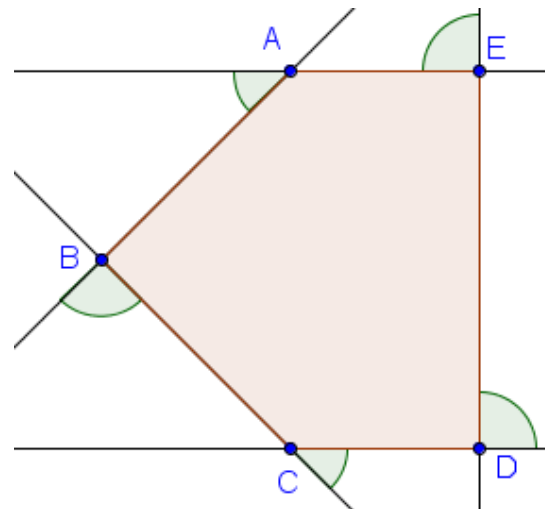
$$(n - 2) \cdot 180$$

Where does the $(n-2)$ come from?



- The sum of the measures of one set of exterior angles is:

$$360^\circ$$



Kite Properties

Two pair of distinct, congruent, consecutive sides.



- **Kite Diagonals Conjecture**

- The diagonals of a kite are perpendicular.

- **Kite Diagonal Bisector Conjecture**

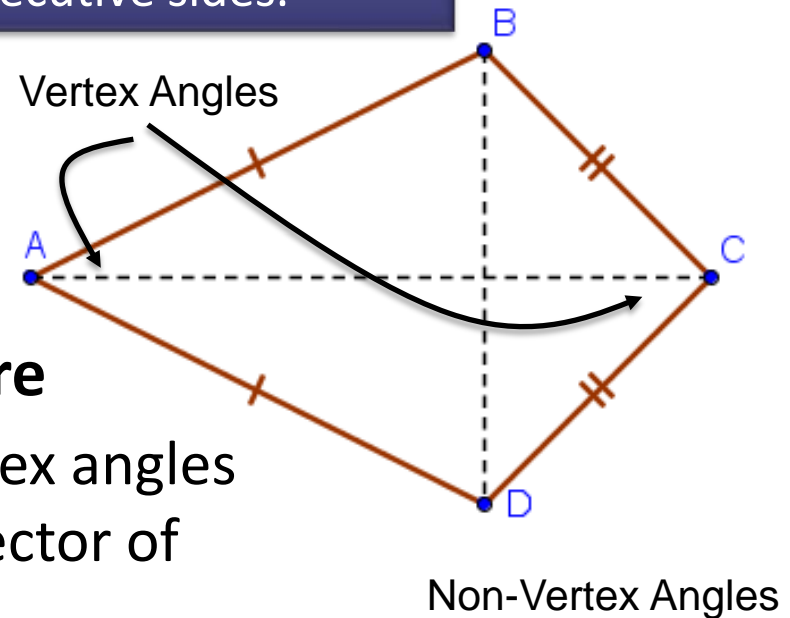
- The diagonal connecting the vertex angles of a kite is the perpendicular bisector of the other diagonal.

- **Kite Angles Conjecture**

- The Non-Vertex angles of a kite are congruent.

- ***Kite Angle Bisector Conjecture**

- The Vertex angles of a kite are bisected by a diagonal.

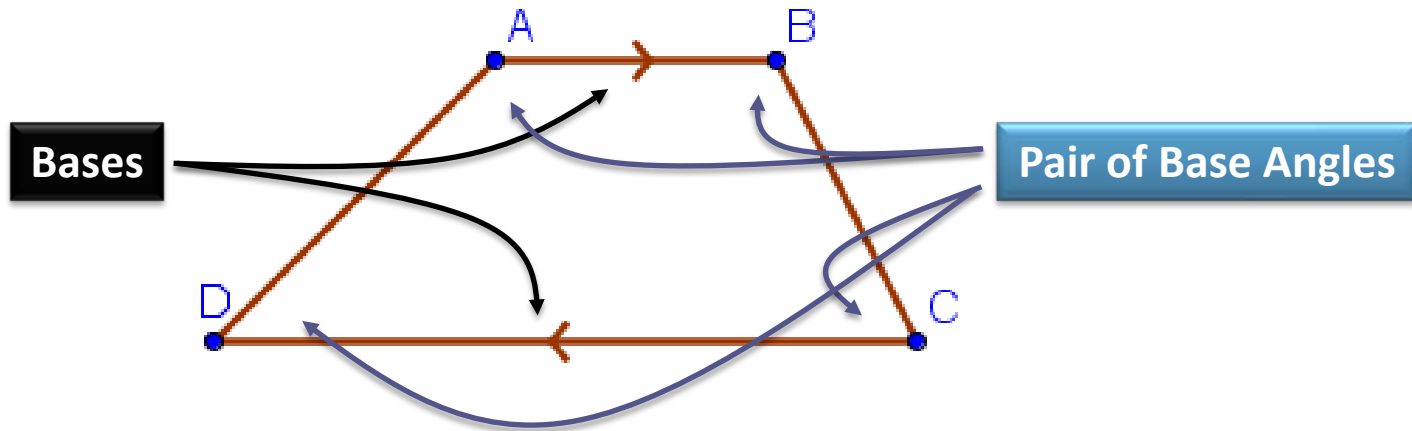




Review: Trapezoid Definition

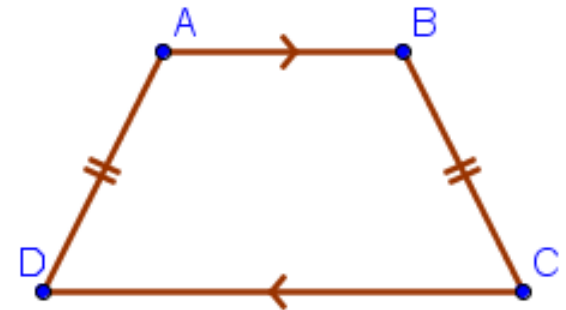
- **Trapezoid**

- A Quadrilateral with exactly one pairs of parallel sides.



- **Isosceles Trapezoid**

- A trapezoid whose two nonparallel sides are the same length.





Trapezoid Properties

- **Trapezoid Consecutive Angles**

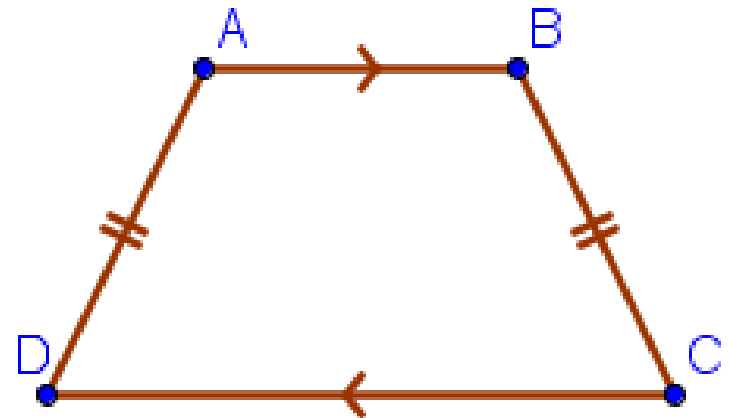
- The consecutive angles between the bases of a trapezoid are supplementary.

- **Isosceles Trapezoid Conjecture**

- The base angles of an isosceles trapezoid are congruent.

- **Isosceles Trapezoid Diagonals Conjecture**

- The diagonals of an isosceles trapezoid are congruent.

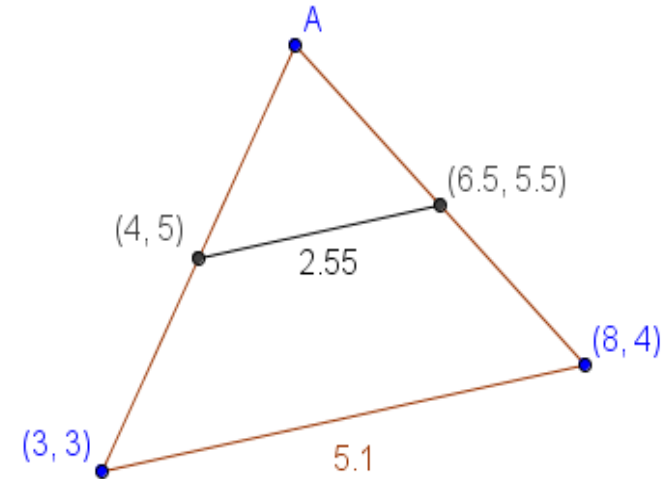




Midsegment Conjectures

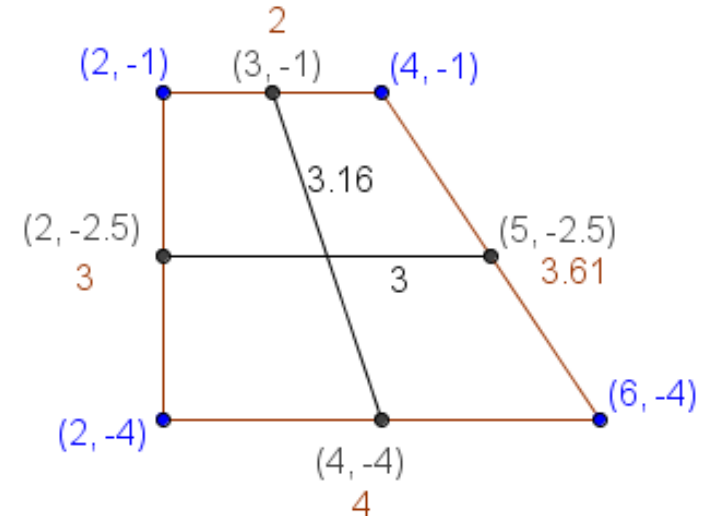
- **Triangle Midsegment Conjecture**

- A midsegment of a triangle is parallel to the third side and $\frac{1}{2}$ the length of the third side.



- **Trapezoid Midsegment Conjecture**

- The midsegment of a trapezoid is parallel to the bases and is equal in length to the average of the length of the bases.





Parallelogram Conjectures

- **Opposite Angles**

- The opposite angles of a parallelogram are congruent.

- **Consecutive Angles**

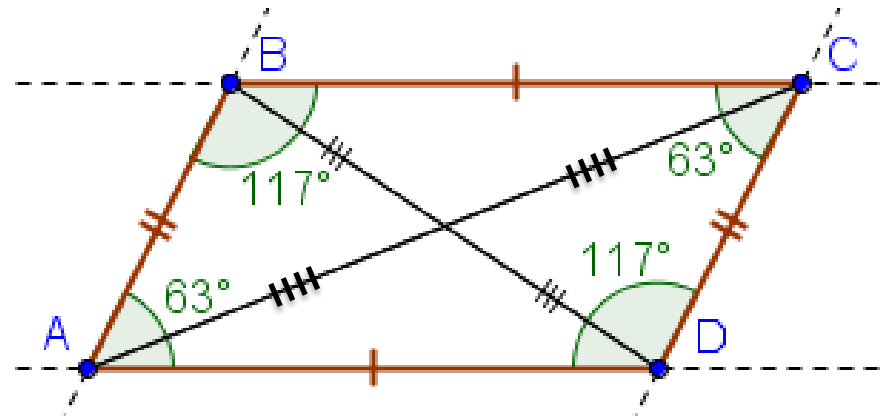
- The consecutive angles of a parallelogram are supplementary.

- **Opposite Sides**

- The opposite sides of a parallelogram are congruent.

- **Diagonals**

- The diagonals of a parallelogram bisect each other.



“Special” Parallelogram Conjectures



- **Perpendicular Bisectors**

- The diagonals of a rhombus are perpendicular bisectors.

- **Angle Bisectors**

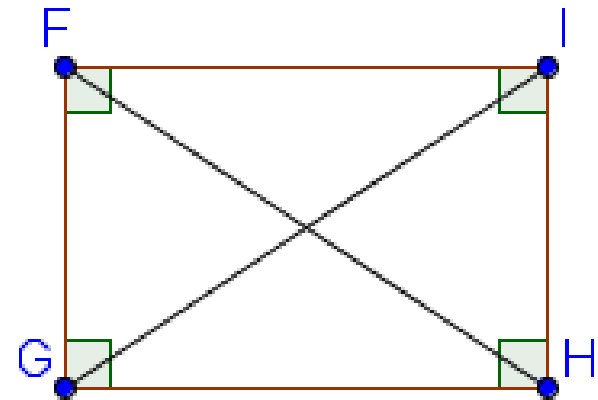
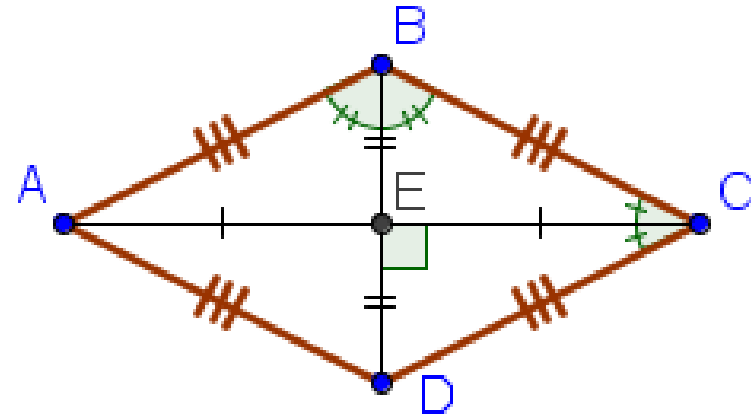
- The diagonals of a rhombus bisect the angles of the rhombus.

- **Rectangle Angles**

- The measure of each angle of a rectangle is 90° .

- **Rectangle Diagonals**

- The diagonals of a rectangle are congruent.





Applied Math – Daily Summary

- **Announcements**

- None

- **Class Objectives**

- Work on “Ratio/Proportion” Project

- **Assignment**

- Continue work on “Ratio/Proportion” Project



“Ratio/Proportion” Projects

- **The project should focus on using Ratio/Proportion in an applied situation. Some options might be:**
 - Scale Drawings (Art, Design)
 - Drawing/graph paper with colored pencils
 - Blueprint (Architecture)
 - For example, measure section of school and create blueprint
 - Scale Models (Design & Engineering)
 - Maybe use toothpicks or spaghetti with glue
 - Technical Drawings (Design & Engineering)
 - Using Maps & Models (i.e., area of US States from map)
- **Any project must specify how ratio/proportion is being used, and it should be used correctly throughout.**