Geometry

March 11-15, 2024
Chapter 7 Polygons End -- Chapter 11 Area

Plan for week overview:

Monday - review Chapter 7 (excluding midsegments)

Tuesday - **Chapter 7 TEST**

Wednesday - **Section 11.1:** perimeter/circumference/arclength of circles

Thursday - PI DAY 3.14 Celebration

Friday - area of polygons and circle with composite shapes

This week's objectives from Chapter 7.

Find the sum of interior and exterior angles of polygons.
Classify polygon: concave/convex, hexagon, etc.

Use the properties of quadrilaterals to find measures of
ANGLES and segments by DIAGONALS in

- Parallelogram, rectangle, rhombus, square
- Trapezoid, isosceles trapezoid
- Kite

CC State Standards	CC Mathematical Practice Focus
HSG-CO.C.11 HSG-SRT.B.5 HSG-MG.A.1 HSG-MG.A.3	MP2, MP3, MP6, MP8

Monday

Monday - warmup with online assignment of these problems - 10 minutes only

1*	2	3*	4	5*	6	7*	8	9*	10
11*	12	13*	14	15*	16	17*	18	19*	20
21*	22	23*	24	25*	26	27*	28		

- Review past notes, test, and graphs of trapezoid and kite worksheets from THURSDAY
- If time, finish clue sheet C, D, F as did A,B, E Friday

Wednesday: Section 11.1

- Watch Circumference of a circle video:

  https://static.bigideasmath.com/protected/content/hs_tut/geo/c11/01/HSCC_Geom_11_01_ee1/HSCC_Geom_11_01_ee1.html and take notes on SJ pg.316
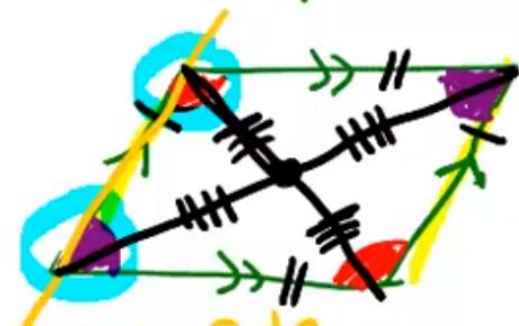
- Discuss the value of PI and tomorrow's celebration of it.
- Discuss arclength as a partial circumference
- Watch video #3 about application on distance using a wheel. SJ pg 315
- Watch video #4 on composite figure perimeter with side lengths.

- Complete student journal pg. 318 # 1-5   (exclude radian discussion)

Thursday PI DAY 3.14 Celebration

- The Pi Song: https://www.youtube.com/watch?v=3HRkKznJoZAH
- Website for MILLION digits of PI: ttps://www.piday.org/million/
- Take the quiz
- The reading of Sir Cumference and the Dragon of Pi
  https://www.youtube.com/watch?v=39aknOrsnbs
- History video: https://www.youtube.com/watch?v=1-JAx3nUwms
- Bonus points:
  - Most recited values of PI (1st = 3 pts, 2nd = 2 pts, 3rd = 1 pt)
  - Bring in edible PI items (Pie = 3 pts, others at discretion of Mrs. Pletcher see list)

Friday: Section 11.2

- Watch AREA of a circle video:

  https://static.bigideasmath.com/protected/content/hs_tut/geo/c11/02/HSCC_Geom_11_02_ee1/HSCC_Geom_11_02_ee1.html and take notes on SJ pg.322

- Discuss sector as a partial area
- Watch video #3 about area of sector (partial area)
- Watch video #5 on composite figure area with side lengths.

- Complete student journal pg. 323 # 3-8   (exclude discussion)

PARALLELOGRAM --- defined by 2 pairs of parallel sides
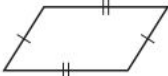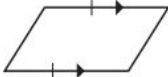
EdPuzzle notes:

Ways to Prove a Quadrilateral Is a Parallelogram

1. Show that both pairs of opposite sides are parallel. *(Definition)*	
2. Show that both pairs of opposite sides are congruent. *(Parallelogram Opposite Sides Converse)*	
3. Show that both pairs of opposite angles are congruent. *(Parallelogram Opposite Angles Converse)*	
4. Show that one pair of opposite sides are congruent and parallel. *(Opposite Sides Parallel and Congruent Theorem)*	
5. Show that the diagonals bisect each other. *(Parallelogram Diagonals Converse)*	

NOTES: focus on DIAGONALs relationships

Finishing Drawing Notes for use on TEST and a grade.

Due at time of formal unit test TBA

(10) points total
- Label shape and measures for sides, at least 2 angles at diagonal and polygon vertex intersection. (5)
- Have some notes on diagonals characteristics as properties of the shape. (3)
- Color (2)