## Edwards ♥ 2016-2017 ♥ B/A Day Schedule ♥ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ♥ Block\_\_\_\_\_\_

**Geometry Honors Unit 8 Syllabus**





**I love Math!**

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| **UNIT 8: Circles HOMEWORK POLICY:** *In order to receive a 3, you must do the following:* | | | | |
| 1. Write your name and date along with the assignment in the top margin. All work must be done in pencil or black pen. 2. All problems/pictures must be copied (except word problems). Your pictures/work should verify your answers. 3. Every problem must be attempted to the best of your ability. Use your book and notes for assistance. 4. All work must be shown, and it should be neat and organized (hint: circle or underline your answers) 5. All book work odd problems should be checked in the back of the book and corrected using a non-black pen. 6. All worksheet problems should be checked on **cindyedwards.weebly.com** and fully corrected in a non-black pen. | | | | |
| **DATE** | **TEXT** | **OBJECTIVES** | **HOMEWORK ASSIGNMENT** | **GRADE** |
| **Mon/Tue,**  **March 13/14** |  | Test on Unit 7 | Read 10-1: Complete notes on Circles and Circumference and do 1-15 on the back |  |
| **Tuesday, March 14 is Pi Day!**  **Don’t forget to wear your shirt & bring your food before 1A to room 305!** | | | | |
| **Wed/Thu,**  **March 15/16**  *Day 1* | **10-1**  **10-2**  **11-3** | Circles and Circumference  Arc length  Area of Circles & Sectors | 10-1, 10-2 & 11-3 Practice Worksheet |  |
| **Fri/Mon,**  **March 17/20**  *Day 2* | **10-2** | Angles and Arcs    10-2 Classwork Practice | p. 696-97 #1-11, 26-37 all  *Hint: Draw circles and fill in all angle measures!* |  |
| **Tue/Wed,**  **March 21/22**  *Day 3* | **10-3**  **10-5** | Arcs and Chords  Tangents | 10-3 and 10-5 Practice Worksheet |  |
| **Thu/Fri,**  **March 23/24**  *Day 4* | **10-4** | Inscribed Angles    10-4 Classwork Practice | P. 713-15 #11-18, 25-28, 32-36 all *(on handout*) |  |
| **Mon/Tue,**  **March 27/28**  *Day 5* | **10-6** | Secants, Tangents, & Angle Measures | p. 732-33 #8-29 all *(on handout)* |  |
| **Wed/Thu,**  **March 29/30**  *Day 6* | **10-7** | Special Segments in Circles  ***March 30: CAV CONNECTION*** | 10-6 and 10-7 Review Worksheet |  |
| **Fri/Mon,**  **Mar. 31/ April 3**  *Day 7* | **10-8** | Equations of a Circle      2 Big Circles Practice | p. 746-47 #1-29 odd, omit #25  Start the Unit 8 Test Review tonight! |  |
| **Tue/Wed,**  **April 4/5**  *Day 8* | **10-1**  **to**  **10-7** | Review Unit 8  **Test on Unit 8 (Part 1)** | Unit 8 Test Review Worksheet |  |
| **Thu/Fri,**  **April 6/7**  *Day 9* | **10-1**  **to**  **10-7** | **Test on Unit 8 (Part 2)**  *First Grade of the 4th Quarter* **☺**  ***April 7: Adjusted dismissal*** | **TOTAL POINTS:** |  |
| **Spring Break: April 8-16**  School starts back on Monday, April 17 (B Day) | | | | |

**UNIT 8: Circles**

**Learning Targets:**

**Target 1:**

♥I can define, identify, and use standard notation for the following: radius, diameter, chord, secant, tangent, major arc,

minor arc, intercepted arc, central angle, inscribed angle, congruent arcs, congruent circles, concentric circles, and

common tangents.

**Target 2:**

♥I can relate measures of central angles to fractions of a circle.

♥I can calculate circumference, arc length, and the area of a sector.

**Target 3:**

♥I can apply properties of circles to find measures of angles or arcs formed by radii, chords, secants, and tangents.

♥ I can apply properties of circles to find measures of radii, diameters, chords, secant segments, and tangent segments.

**Target 4:**

♥I can, given the coordinates of the center of a circle and a point on the circle, write the equation of the circle.

♥I can, given the coordinates of the center of a circle and the length of the radius, write the equation of the circle.

♥I can identify the center’s coordinates, the radius, and diameter when given the equation of a circle.

♥I can, when given the coordinates of the center and radius of the circle, identify a point on the circle.

♥I can, when given the coordinates of the endpoints of a diameter, identify a point on the circle.

**Target 5:**

♥I can construct a tangent line from a point outside a given circle to the circle.

♥I can construct a triangle, square, and regular hexagon inscribed in a circle.

♥I can construct the inscribed and circumscribed circles of a triangle.

**ENDURING UNDERSTANDINGS: Topics involving ratios are an important foundation which leads to solving problems that involve scale drawings and similar figures.**

1. Many things in our world are defined by the relationship between lines and circles.
2. Circles are used frequently in construction, art, and everyday life.

**ESSENTIAL QUESTIONS: How can geometric figures be used to represent real world situations?**

1. What is the difference between a circle and something being circular?
2. Where in our world are circles present?
3. How do previously learned concepts help us understand segment and angle relationships in circles?
4. What relationships can be found as lines or parts of lines intersect a circle?

**SOL Objectives (2009):**

**G.4** The student will construct and justify the constructions\* of

a) a line segment congruent to a given line segment;

b) the perpendicular bisector of a line segment;

c) a perpendicular to a given line from a point not on the line;

d) a perpendicular to a given line at a given point on the line;

e) the bisector of a given angle;

f) an angle congruent to a given angle; and

g) a line parallel to a given line through a point not on the given line.

h) \*Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.†

i) \*Construct the inscribed and circumscribed circles of a triangle.†

j) \*Construct a tangent line from a point outside a given circle to the circle.†

**G.11** The student will use angles, arcs, chords, tangents, and secants to

a) investigate, verify and apply properties of circles;

b) solve real-world problems involving properties of circles; and

c) find arc lengths and areas of sectors in circles

**G.12** The student, given the coordinates of the center of a circle and a point on the circle, will write the equation of the circle.