**Edwards Syllabus** **☺ 2017-2018 ☺ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ☺Block\_\_\_\_\_\_**

**GEOMETRY HONORS UNIT 5 – SIMILAR POLYGONS**

**HOMEWORK POLICY:** *In order to receive a 3, you must do the following (.5 off for each objective not completed):*

1. Write your name and date along with the assignment in the top margin. All of your work must be done in pencil or a black pen.
2. Copy each problem. If you have to do any graphing, it must be done on graph paper.
3. Every problem must be attempted to the best of your ability. Use the internet (Khan Academy) if you have problems understanding.
4. All algebraic work must be shown, and it should be neat and organized (hint: circle or underline your answers).
5. All worksheets should be checked and fully corrected using a red pen before coming to class. Go to **cindyedwards.weebly.com.**
6. *Finally, assess your understanding by evaluating yourself before coming to class.*

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| **DATE** | **DAILY LEARNING TARGETS & OBJECTIVES** | | **INDEPENDENT PRACTICE (HOMEWORK)** | | | **GRADE** |
| Wed, Dec. 13  ***Day 0*** | **Test on Unit 4** | | Solving Proportions & Equations Worksheet | | |  |
| L. Target? | Emoji | What Questions do you still have? | What were your AHA Moments? | | | |
| Fri, Dec. 15  ***Day 01*** | Introduction to Proportions  ***Progress Reports Issued*** | | 7-1 Skills Practice on Ratios & Proportions | | |  |
|  | Emoji | What Questions do you still have? | What were your AHA Moments? | | | |
| Tue, Dec. 19  **Day 02** | Similar Polygons | | Geometry IXL P.2 & P.4 | | |  |
| L. Target? | Emoji |  | What were your AHA Moments? | | | |
| hanukkah[1]Baby_Jesus_with_Yellow_Star[1]**December 21 to January 1: Winter Holiday = NO SCHOOL!**    *1st day back: Tuesday, January 2 (A day)* | | | | | | |
| Tue, Jan. 2  ***Day 03*** | Similar Triangles | | 7-2 & 7-3 Homework Worksheet  Geometry IXL P.5 & P.7 | | |  |
| L. Target? | Emoji | What Questions do you still have? | What were your AHA Moments? | | | |
| Thu, Jan. 4  ***Day 04*** | Parallel Lines and Proportional Parts | | 7-1 to 7-4 Review Worksheet  Geometry IXL P.10 | |  | |
| L. Target? | Emoji | What Questions do you still have? | What were your AHA Moments? | | | |
| Mon, Jan. 8  ***Day 05*** | Parts of Similar Triangles | | 7-4 & 7-5 Proportional Lengths HW | | |  |
| L. Target? | Emoji | What Questions do you still have? | What were your AHA Moments? | | | |
| Wed, Jan. 10  ***Day 06*** | Unit 5 Test Review | | Unit 5 Test Review Worksheet | | |  |
| L. Target? | Emoji | What Questions do you still have? | What were your AHA Moments? | | | |
| Fri, Jan. 12  ***Day 07*** | **Unit 4 Test** | | **TOTAL POINTS:** |  | | |
| L. Target? | Emoji | What Questions do you still have? | What were your AHA Moments? | | | |

**LEARNING TARGETS: I can . . .**

**Target 1:** use the properties of similar polygons, including: identifying corresponding parts of similar polygons; writing equivalent proportions; and applying proportions to solve problems involving Science, Technology, Engineering and Mathematics (STEM).

**Target 2:** show that triangles are similar by AA, SAS, or SSS using algebraic and coordinate methods as well as deductive proofs, including: investigating and identifying similarity between triangles; and computing lengths of segments of similar triangles.

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**UNIT 5 ENDURING UNDERSTANDINGS: *Topics involving ratios are an important foundation which leads to solving problems that involve scale drawings and similar figures.***

1. When two or more objects are scaled versions of each other, there will be a set of characteristics that define relationships.
2. There are methods available to prove that geometric figures are similar.
3. The beauty in some aspects of nature can be explained using geometric concepts.

**UNIT 5 ESSENTIAL QUESTIONS: *How can geometric figures be used to represent real world situations?***

1. How do similar polygons compare to congruent polygons?
2. How are ratios and proportions related to similarity?
3. Where does similarity occur in nature?

**SOL Objectives (2009):**

**G.7** The student, given information in the form of a figure or statement, will prove two triangles are similar, using algebraic and coordinate methods as well as deductive proofs.

**G.14** The student will

a) use proportional reasoning to solve practical problems, given similar geometric objects; and

b) determine how changes in one dimension of an object affect area and/or volume of the object.