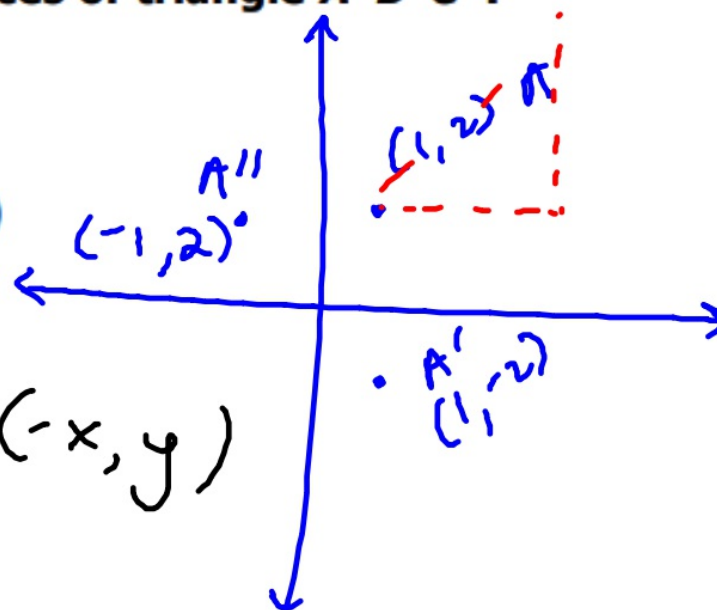


Good afternoon: attach warm up to notes, then answer

Triangle ABC has vertices at A(1,2), B(4,6), and C(4,2) in the coordinate plane. The triangle will be reflected over the x-axis and then rotated 180° about the origin to form triangle A' B' C'. What are the vertices of triangle A' B' C'?

- F A' (1, 2), B' (4, 6), C' (4, 2)
- G A' (1, -2), B' (4, 6), C' (4, -2)
- H A' (-1, -2), B' (-4, -6), C' (-4, -2)
- J A' (-1, 2), B' (-4, 6), C' (-4, 2)

$$(x, y) \rightarrow (x, -y) \xrightarrow{(-x, -y)} (-x, y)$$



Reminders:

retakes available in any DS except Weds.

Project is due a week from Monday

Assessments are being passed back

Look over mistakes, make corrections and ask questions of your partners

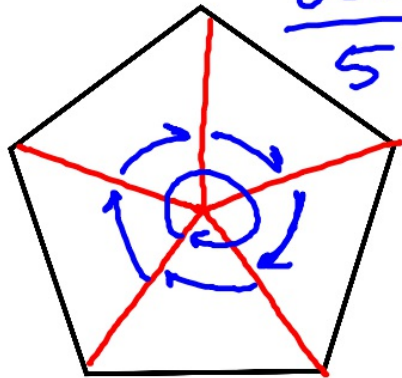
Need to retake front? HW is "Performing and Describing Transformations" wksht

Need to retake back? HW is "More Transformations Practice"

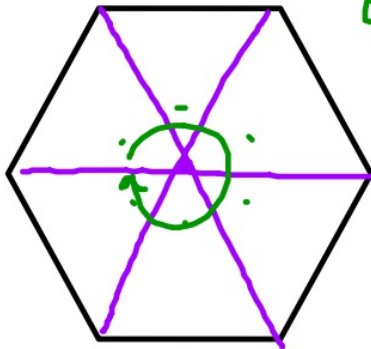
Retakes available in any DS except Weds + Tuesday 4-5p

***Retakes replace your grade if higher***

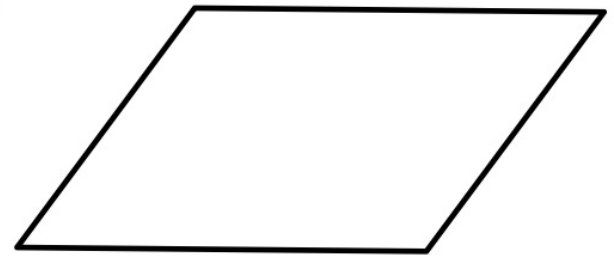
# Symmetry



$$\frac{360}{5} = 72^\circ$$

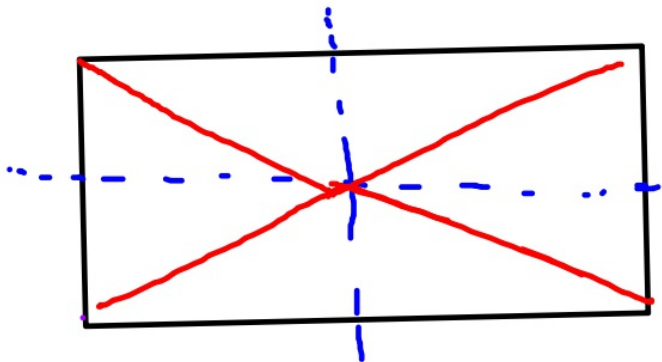


$$\frac{360}{6} = 60^\circ$$



180° rotational  
Symmetry.

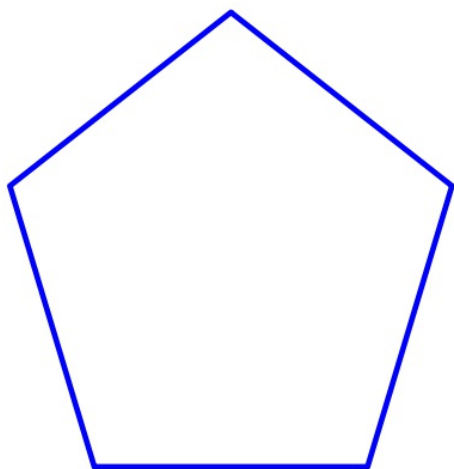
no lines  
of symm.



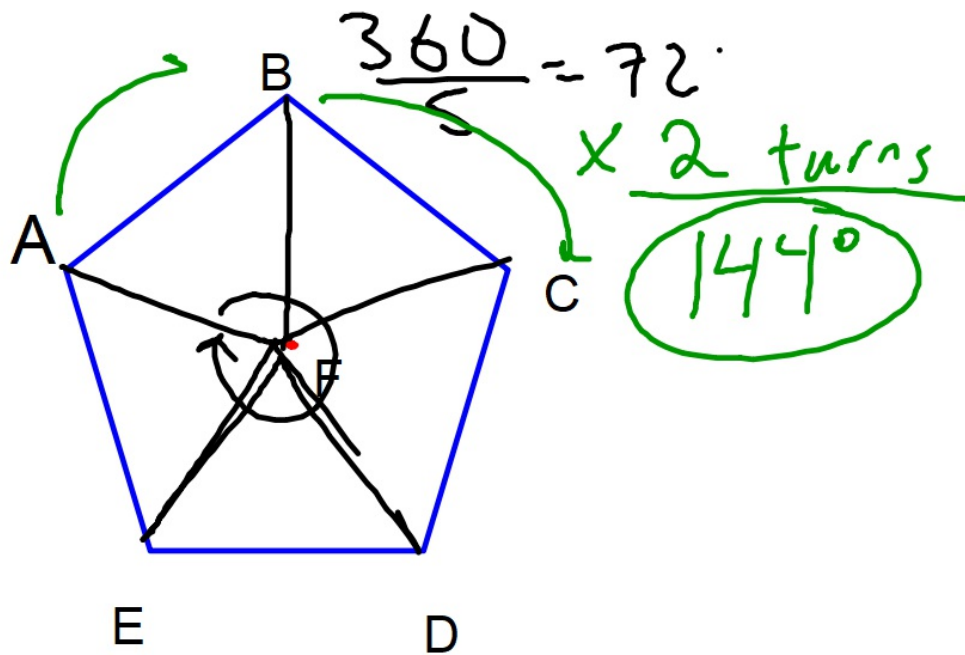
2 lines  
of symm.  
180° rot.

# NOTES

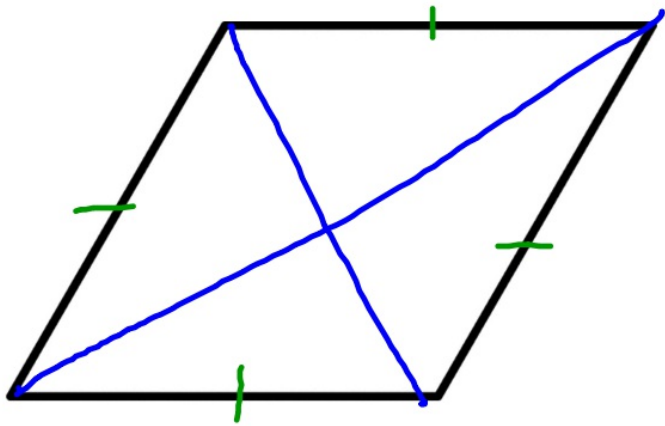
What questions could you ask about this shape?



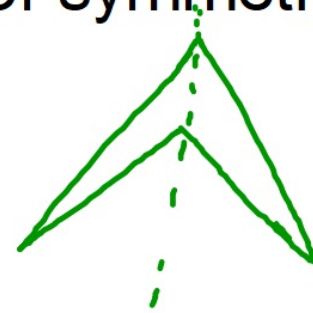
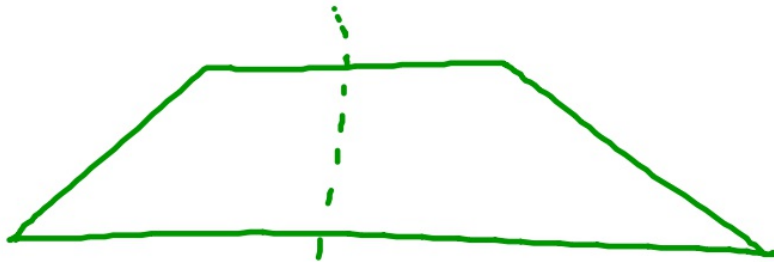
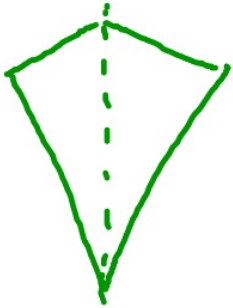
What is the minimum number of degrees of clockwise rotation about point F needed to carry point A onto point C?



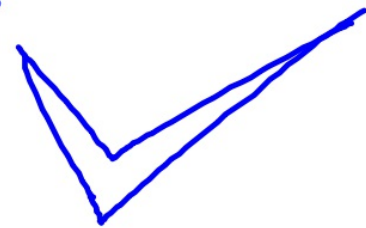
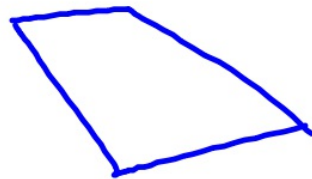
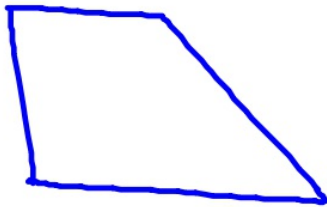
Identify all lines of symmetry of this rhombus

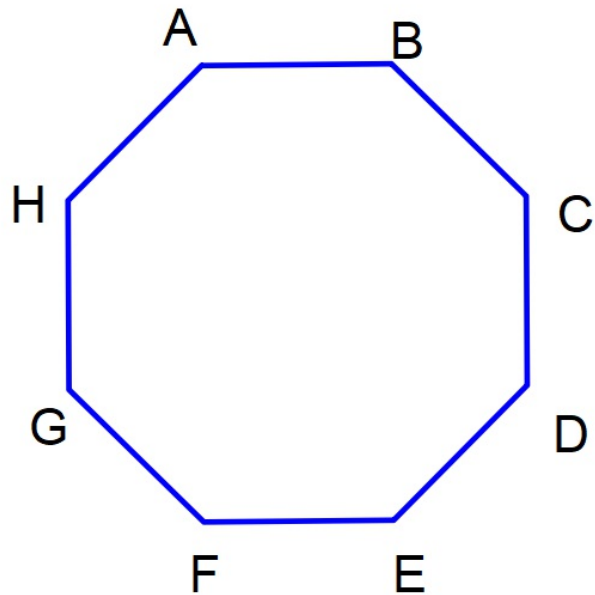


Draw a quadrilateral with exactly 1 line of symmetry



Draw a quadrilateral with no lines of symmetry



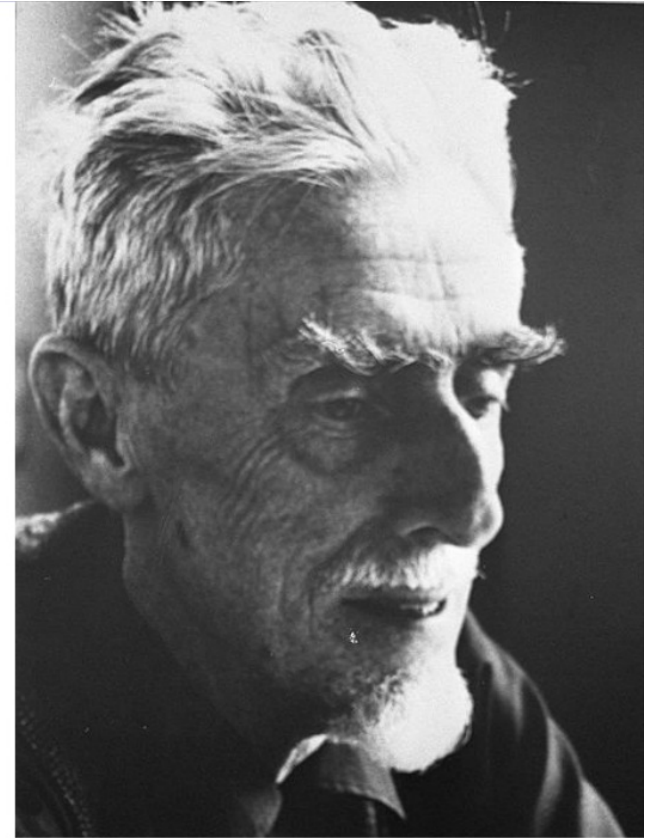


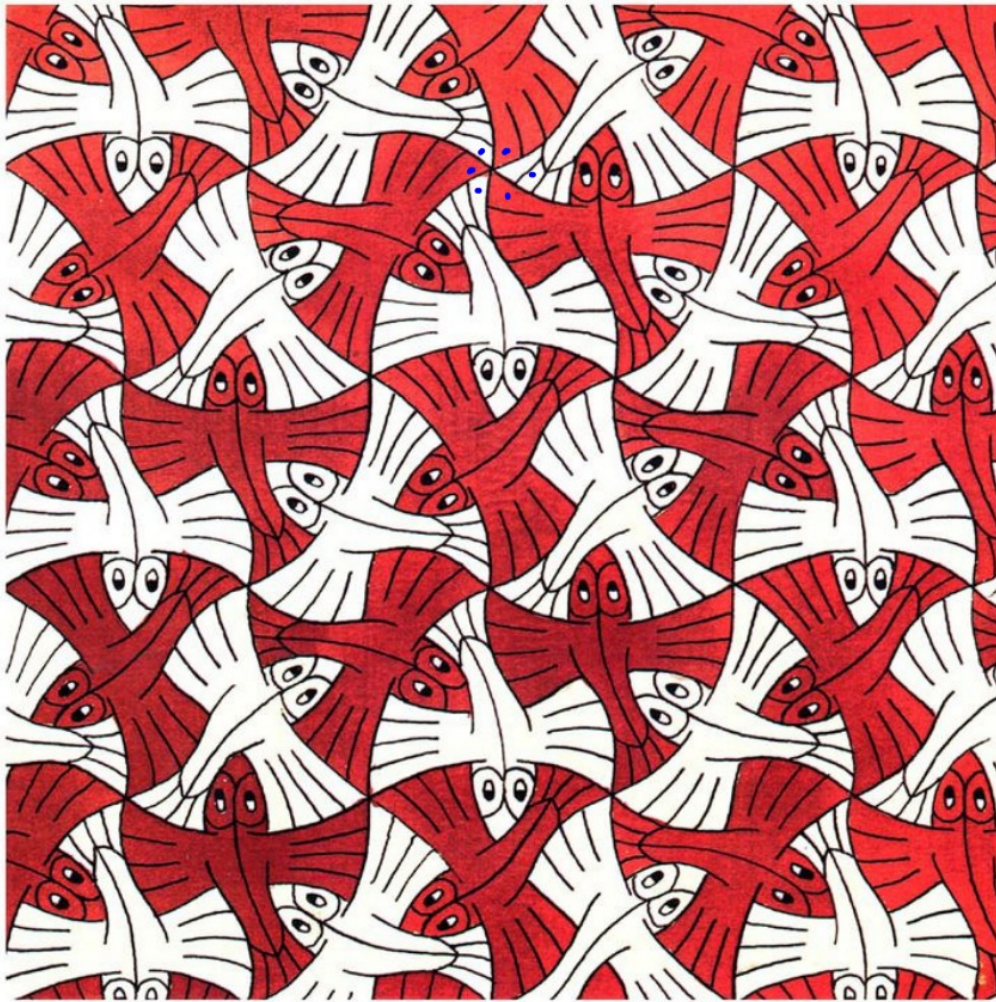
A CCW rotation of  $225^\circ$  about point G would carry point C onto which point?





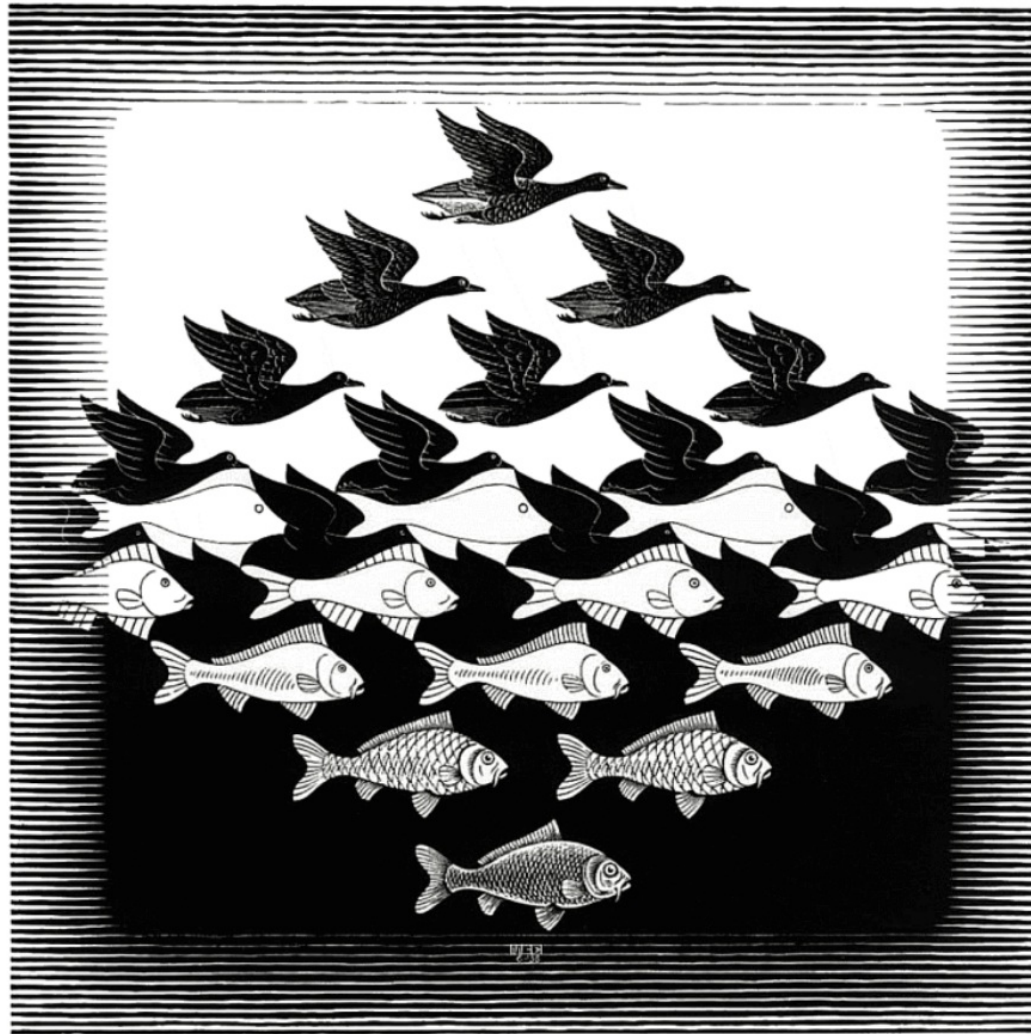
M.C. Escher  
Dutch artist  
1898-1972





**Tessellations**  
a shape that tiles the plane  
without gaps or overlaps





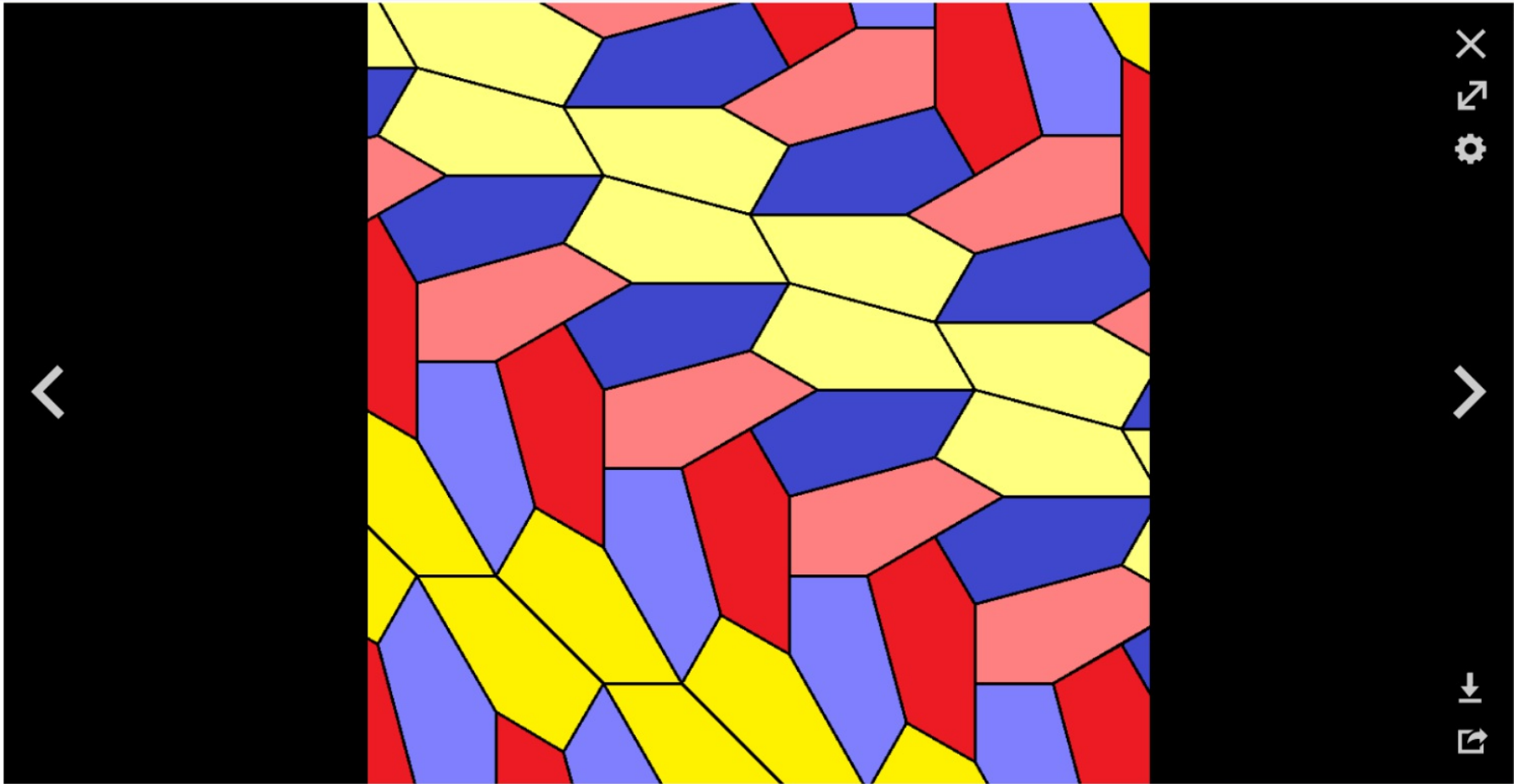


Islamic Art,  
Alhambra Palace  
Spain


Inspired Escher







The 15th convex monohedral pentagonal tiling, discovered in 2015

 [More details](#)

 Tomruen - Own work

 CC BY-SA 4.0



Headed back to computer lab

~~Start with Task 1: Polygraph...playing "Guess Who" but with geometric images~~

Task 2a: Try Transformation Golf if you didn't on Tuesday

Task 2b: Play Euclidea or Euclid the Game

Task 2c: Make Tessellations. Submit a screenshot thru link!

Task 3: Symmetry Artist! Experiment with reflectional and rotational symmetry. Submit a screenshot thru link!

Homework:

work on your project, it is due a week from Monday!