Warmup $1/(31000 \times 10^{-3})$

1) Get a "Regular Polygon Symmetry" sheet from my desk. Complete this sheet. On your warmup page, just write the word "worksheet".

ONLINE TEXTBOOK LOGINS

- **The website is my.hrw.com.**
- I have printed out your username (which is just your email)
- Because of security reasons, it won't give me your password.
- The slip of paper has a **temporary password.** The first time, you can log in using this password, but you will be required to change it to something new.

Check Homework

1. 
Lines of symmetry: 1

2. 
Lines of symmetry: 8

3. 
Lines of symmetry: 1

4. 
Angles of rotation: no rotational symmetry

5. 
Angles of rotation: 45°, 90°, 135°, 180°, 225°, 270°, 315°

6. 
Angles of rotation: no rotational symmetry

7. 
rotational symmetry

8. 
both line and rotational symmetry

12. no line symmetry; angle of rotational symmetry: 180°

13. one line of symmetry; no rotational symmetry

16. **Explain the Error** A student was asked to draw all of the lines of symmetry on each figure shown. Identify the student's work as correct or incorrect. If incorrect, explain why.

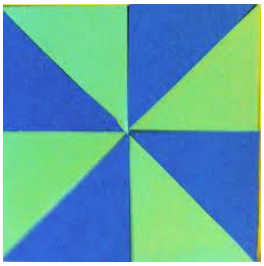
a. 
Incorrect; the two diagonals are not lines of symmetry.

b. 
Incorrect; the figure has no lines of symmetry.

c. 
Incorrect; the figure has three more lines of symmetry, each connecting the remaining pairs of opposite vertices.

Angle of Rotation?

Angle of Rotation?

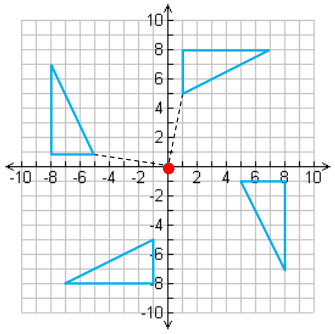


Angle of Rotation?

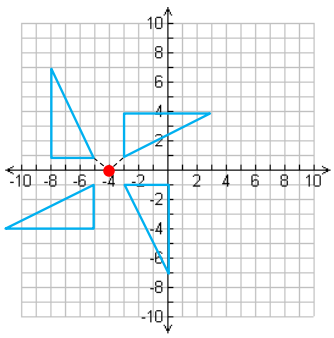
if colors don't matter

if colors do matter

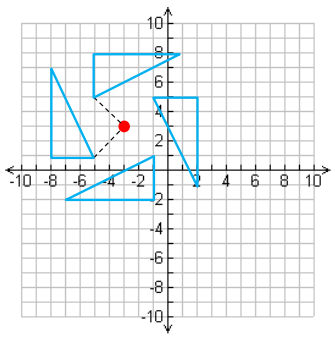
Center of rotation = Origin



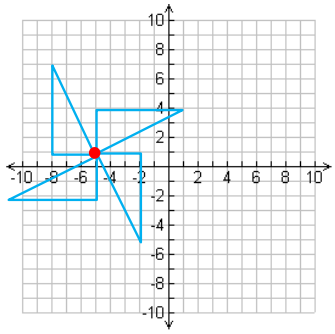
Center of rotation = (-4, 0)



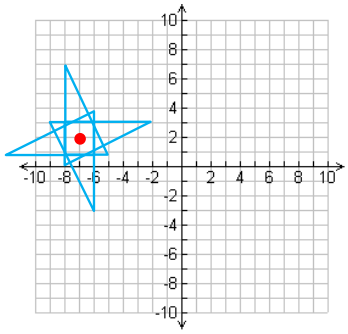
Center of rotation = (-3, 3)



Center of rotation = (-5, 1)



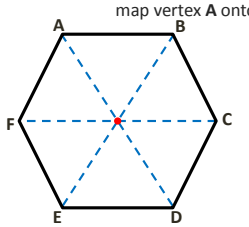
Center of rotation = (-7, 2)



WORKSHEET

Rotational Symmetry

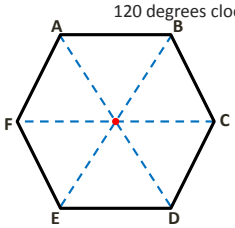
- A clockwise rotation of how many degrees would map vertex **A** onto vertex **E?**



Each vertex:

Rotational Symmetry

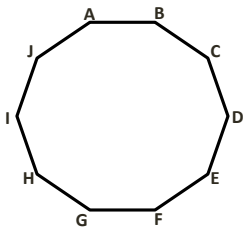
- Where would vertex **D** end up after a rotation of 120 degrees clockwise?



Each vertex:
= 2 vertices
Vertex F

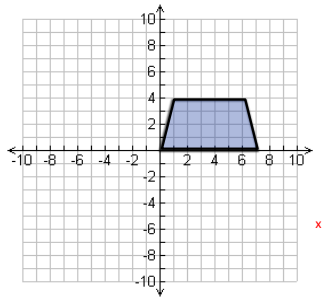
Rotational Symmetry

- Where would vertex **A** end up after a clockwise rotation of 396°?
- How many degrees of a rotation would map vertex **F** onto vertex **J?**



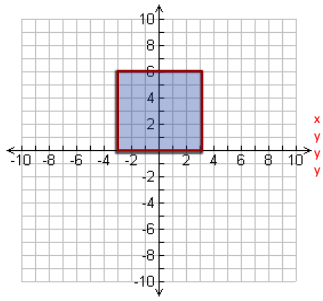
Symmetry in the Coordinate Plane

- What line(s) can you reflect across to map the figure onto itself?



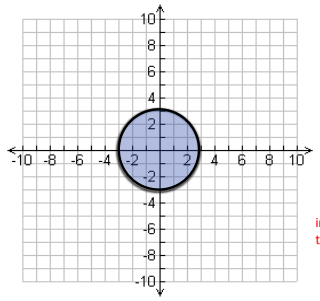
x = 3.5

- What line(s) can you reflect across to map the figure onto itself?



x = 0
y = 3
y = x +3
y = -x + 3

- What line(s) can you reflect across to map the figure onto itself?



infinite amount through (0, 0)

Homework

- Worksheet