

***** When you have completed a task, place a check in the box to indicate it is updated on your DP. *****

1. DP entry #1: Hexaflexagon DUE DATE: Wednesday Dec 4, 2013

 A

A. Write a brief paragraph to explain how your design uses rotational symmetry or line-reflection symmetry or both types of symmetry. Refer to your pictures in your paragraph. (see part B)

 B

B. Take pictures of the "hexagon-faces" produced by your hexaflexagon to illustrate the symmetry you choose to write about in part A. Post these pictures beside your paragraph.

 C i

C. Write a brief reflection paragraph about the following:

i. Describe some feature of your hexaflexagon design that pleases you most and explain why.

 C ii

ii. Describe the symmetry refinements you would make to your design now that you better understand the line-reflection and rotational symmetry that can be incorporated in the design.

 C iii

iii. Describe something you learned about yourself from this activity.

2. DP entry #2: Snail-Trail Graffiti GGB Lab DUE DATE: Wednesday Dec 4, 2013

 A

A. Open up your lab and clean up the graphics window by moving any checkboxes to one area of the screen or hiding objects that were needed in the creation of the lab but are not needed in the final design. Close the Algebra window.

 B

B. Create a beautiful symmetrical design that is pleasing to you BUT not too busy so that viewers can see the symmetry pattern rather than just a bunch of color without clarity.

 C

C. Get a screen shot of your beautiful and symmetric design.

If you are using a windows machine I can show you how to use PrintScreen and Paint to save a simple JPEG.

 D

If you are using a MAC you should be able to select the area on the screen and save it (MAC users help me out, but Jennifer briefly showed me this can be done.)

D. Write a brief paragraph about the geometry concepts used to create this design.

 E

E. Reflect and write a brief paragraph about what you learned about yourself in the process of creating this design.

3. DP entry #3: Two Rivers GGB Lab DUE DATE: Thursday Dec 5, 2013

 A

A. Write a brief description of the original problem scenario. (HINT: Copy from the Lab Directions.)

 B i
screen
shot#1

B. Open your Two Rivers GGB file. Be sure to show the original scenario and NOT the Tangent Line Scenario. Close the Algebra window and clean up the graphics screen. Get two screen shots

i. One screen shot should show a location where you do not want to build your house because it does NOT satisfy the requirements specified by the problem. In a brief statement, explain why this location is NOT acceptable. Be sure to reference the geometry involved that leads you to this conclusion. Refer to the screen shot picture in your written description.

 B ii
screen
shot#2

ii. One screen shot should show a location where you do want to build your house because it does satisfy the requirements specified by the problem. In a brief statement, explain why this location IS acceptable. Be sure to reference the geometry involved that leads you to this conclusion. Refer to the screen shot picture in your written description.

 C (B i)
stmt
#1

C. Write two brief statements, referencing the geometry concepts that lead you to your conclusions and referencing the screen shot that illustrates each conclusion specified in Part B section i. and section ii.

 C (B ii)
stmt
#2

Note these are the same statements from part B. but I mention them again in case you did not read all of part B.

4. DP entry #4: Burning Tent GGB Lab OR Feed and Water GGB Lab DUE DATE: Friday Dec 6, 2013

A

If you choose The Burning Tent LAB:

B i
screen
shot#1

- A. Write a brief description of the original problem scenario. (HINT: You can copy this from the Lab Directions but feel free to add your own clarification to the description.)
- B. Open the file. Close the Algebra window and clean up the graphics screen. Get two screen shots
- One screen shot should show a location where you do NOT want to fill your bucket with water because it does NOT satisfy the requirements specified by the problem. In a brief statement, explain why this location is NOT acceptable. Be sure to reference the geometry involved that leads you to this conclusion. Refer to the screen shot picture in your written description.
 - One screen shot should show a location where you DO want to fill your bucket with water because it DOES satisfy the requirements specified by the problem. In a brief statement, explain why this location IS acceptable. Be sure to reference the geometry involved that leads you to this conclusion. Refer to the screen shot picture in your written description.
- C. Write two brief statements, referencing the geometry concepts that lead you to each of your conclusions while referencing the screen shot that illustrates each conclusion specified in Part B section i. and section ii. Note these are the same brief statements from part B. but I mention them again in case you did not read all of part B.

B ii
screen
shot#2

C (B i)
stmt
#1

C (B ii)
stmt
#2

OR

If you choose The Feed and Water LAB:

A

- A. Write a brief description of the original problem scenario. (HINT: You can copy this from the Lab Directions but feel free to add your own clarification to the description.)
- B. Open the file from PART 1 in which you had to attempt to find the location to feed and then water your horse. Close the Algebra window and clean up the graphics screen. Get a screen shot.
- This screen shot should show a location where you do NOT want to feed your horse at the pasture and then water your horse at the river because it does NOT satisfy the requirements specified by the problem. In a brief statement, explain why this location is NOT acceptable. Be sure to reference the geometry involved that leads you to this conclusion. Refer to the screen shot picture in your written description.
- C. Open the file from PART 2 in which you constructed a solution that always shows you where to feed and water your horse. Get a screen shot.
- This screen shot should show a location where you DO want to feed your horse at the pasture and then water your horse at the river because it DOES satisfy the requirements specified by the problem. In a brief statement, explain why this location IS acceptable. Be sure to reference the geometry involved that leads you to this conclusion. Refer to the screen shot picture in your written description.
- D. Write two brief statements, referencing the geometry concepts that lead you to each of your conclusions and referencing the screen shot that illustrates each conclusion specified in Part B section i. and section ii.
- Note these are the same brief statements from part B. but I mention them again in case you did not read all of part B.

B i
screen
shot#1

C ii
screen
shot#2

D (B i)
stmt
#1

D (C ii)
stmt
#2

5. DP entry #5: Circle Design details to follow DUE DATE: next week TBA

SHOW ME YOUR COMPLETED DP ENTRIES #1-4 in class as you make progress & get a stamp. Final check Dec 9