Lab 5   Name:_____ Checked:_____

Objectives:

Practice creating and modifying Java applets and using methods of the Graphics class.

Assignment:

1. Download and save the http://www.csc.villanova.edu/~map/1051/Chap02/Snowman.java applet

2. Compile and run the applet

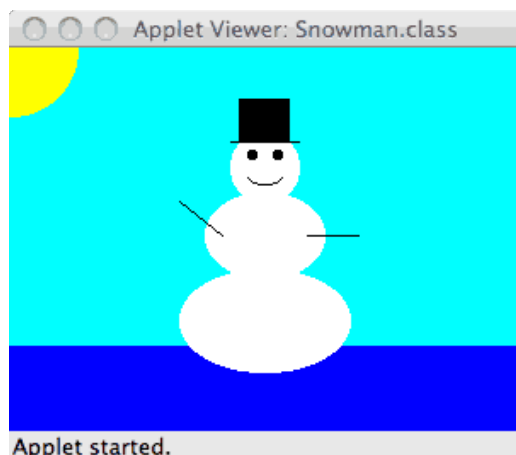3. Look at: http://www.csc.villanova.edu/~map/1051/Chap02/Snowman.html (displays the snowman applet on a webpage).

4. We will create a new applet called **FancySnowman.java** by modifying the current Snowman applet - begin by saving the current snowman applet under the new name (remember to change the name in all places where it occurs, including the comments)
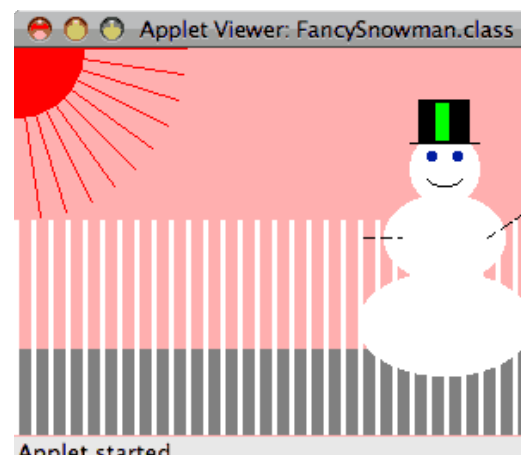Verify that the new applet still compiles and runs (it should still look the same).

5. Make the following changes to the applet. Check result after each change.

- Move the snowman to the right (Note: do NOT do this by re-computing all the numbers)
- Add comments to your program explaining the constants MID and TOP
- Change the color of the ground to gray
- Change the color of the sky to pink
- Change the color of the sun to red
- Change the snowman's eyecolor to blue. *Optional:* Make him look like he is winking!
- Add a highlight to the snowman's hat
- Change his arms so that he is waving with the right arm instead of the left one
- Put in some rays of sunshine
    - *Note:* you do **not** need to do this using a formula or a loop. If you choose to use the formula to find points along the circumference of a circle, the rays come out evenly spaced, as in the example below. Alternatively, you can just try to eyeball some points around the sun, and create lines from the top left corner to these points. Either way, be sure to create at least six rays.
- Add a fence in front of the snowman - it should go up to around halfway his torso
    - This **definitely** needs to get done using a loop!
- *Optional:* Create a webpage that displays your applet