

## Computer Programming Canvas #5 – Proportional Face

Objective: Use the HTML5 canvas object and Javascript to draw a face according to specifications.

1. In your *Computer Programming* folder, create a folder titled *first\_last\_canvas\_5*. Edit your *template.html* file and save it in your *first\_last\_canvas\_5* folder as *draw\_proportional\_face.html*
2. Edit the *draw\_proportional\_face.html* file
  - a) Change *CHANGE ME* to *First Last – Canvas 5*
  - b) Change the width of the canvas to 500 and the height to 600.
  - c) In the draw() method, you are to create and calculate the following variables:

centerX – the center of the canvas along the x-axis

centerY – the center of the canvas along the y-axis

headRadius – take the smaller of the canvas width and height and divide by 3

eyeRadius – headRadius divided by 7

eyeOffsetX - 2.75 times the eyeRadius

eyeOffsetY – headRadius divided by 3

mouthRadius – headRadius divided by 3

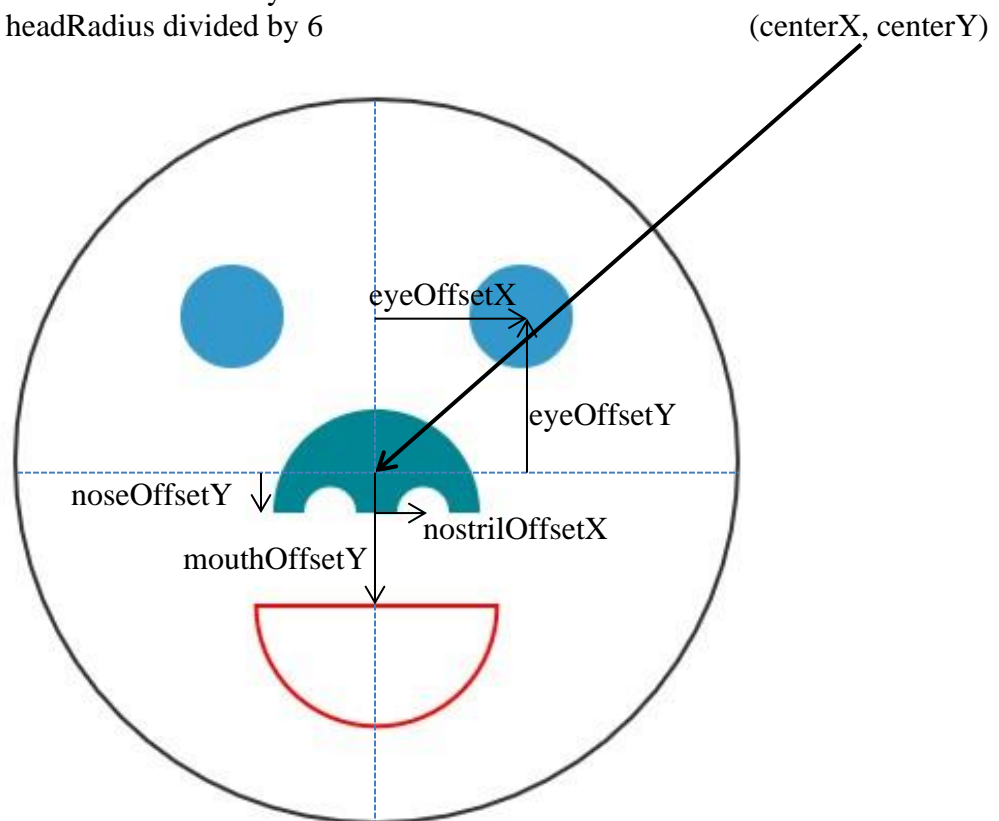
mouthOffsetY – headRadius divided by 2.5

noseRadius – eyeRadius times 2

noseOffsetY – headRadius divided by 6

nostrilRadius – noseRadius divided by 4

nostrilOffsetX – headRadius divided by 6



3. Once your code is finished, change the width of the canvas to 600 and the height to 500. Your face should look exactly the same. Change the width and height to 700. Your face should look the same, just larger.
4. Zip your *first\_last\_canvas\_5* folder. Turn in your *first\_last\_canvas\_5.zip* file.