➢ Find a piece of art (picture or painting) and have it printed or photocopied onto a 8.5×11 sheet of paper.

➢ State where you found your picture.

➢ Identify each of the following functions within your art.
  o Linear: recall the parent function is $\quad y=x$
  o Quadratic: recall the parent function is $y=x^2$
  o Radical: recall the parent function is $y=\sqrt{x}$
  o Rational: recall the parent function is $y=\dfrac{1}{x}$
  o Exponential: recall the parent function is $\quad y=b^x$
  o Sinusoidal: recall the parent function is $y=\sin x$ or $y=\cos x$

  Feel free to identify additional functions.

➢ State the domain and range for the portion of the functions you identified within your art.

➢ Use your knowledge of functions (transformations, key properties, etc.) to determine an equation for the functions you identified within your art.
  o Express your equation in the form $y=af\left[k(x-p)\right]+q$
  o Remember not all the transformations apply to each of the functions
  o The origin and scale must be the same for all functions

The summative evaluation will be marked out of levels. To achieve a level 3 the summative must include one example of each of the functions studied with their corresponding domains and ranges. The transformations used with the functions must model (as best as possible) the curve on the piece of art within the domain and range you stated.

NAME: _____

Submit this page as the cover page of your assignment

Title of picture: _

Artist: _

Source (website or book): _

_ _

Domain of your axis on the graph paper: _

Range of your axis on the graph paper: _

Type of function	Equation	Parent function	Domain (for the portion you identified in the art)	Range (for the portion you identified in the art)
Linear				
Quadratic				
Square Root				
Rational				
Exponential				
Sinusoidal				