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Complex-valued functions can be interpreted as vector fields. If the value of a complex function is interpreted as a vector in the complex plane, there are various ways of coloring a portion of the plane. Color can be assigned to each pixel in a two dimensional region of the plane or we can picture a vector emanating from each point in the region. There are many ways to make the color assignments, limited only by the imagination of the artist. One example is coloring the pixel according to the arctangent of the angle made by the (complex) value of the function with the x-axis. Another example is coloring the pixel according to the magnitude of the value of the function. Images and animations created with Flash will illustrate these and other interpretations of complex-valued functions. (Received September 07, 2010)