Field Trip # 30	**Creating & Saving Fractals**
Developed by:	Keith Lynn
Subject:	Creating & Saving Fractals
Short description:	In this field trip, the students will learn how to draw fractal images such as Jula Sets & the Mandlebrot set & use the netpbm package to store the images.
Educational Level:	9^{th} – 12^{th} Grade
Field trip type:	Lecture with Activity
Educational Outcomes:	The student will be able to: • Understand what a Julia Set is • Draw the Julia Set for a quadratic or trigonometric function • Understand what the Mandlebrot Set is • Store jpg or gif images of Julia Sets or the Mandlebrot Set
Content:	
Notes to instructor:	It is recommended that the netpbm packages be installed on the laptops. The instructor can lead the student through the drawing of the Julia Set or Mandlebrot Set so that the students will see how to change the colors associated with a particular orbit of the function.