

Getting Started 2

The 3D-XplorMath Consortium

For those categories where it makes sense you will be able to choose Morph, Rotate, or Oscillate from the Animate menu to create a “filmstrip” of the object.

As soon as a filmstrip is created it will start to play back. To stop the playback either type Command period, or hold down the mouse button until the end of the filmstrip is reached. When the playback of a filmstrip is interrupted at a particular frame (by typing Command period), it can be restarted at the same frame by typing Command P. The Settings menu has an item to permit the user to set the the number of frames in a filmstrip. There is also an item that lets the user change the way an object is deformed during a Morphing filmstrip. These will be all explained in more detail below.

After a filmstrip is created, you can save it as a QuickTime movie by choosing ”Save Animation as Movie...” from the File menu. There are several important advantages to doing this. First, a movie can be started up almost instantaneously, (while creating a complicate animation from scratch may take several minutes), and secondly a QuickTime movie can easily be converted to a format that will play on other platforms (Unix and Windows in particular). The main disadvantage is that even a fairly short movie can take several hundred KBytes of disk space. Movies can be played back using the Quicktime movie player utilities, and there is also a player built in to

3D-XplorMath (choose Open Movie... from the File menu).

The Documentation Menu has items "About This Category..." and "About This Object..." . The first will bring up a window explaining some mathematical and programming details concerning the current category, and also what facilities are provided by the program to help visualize objects of the category, and how to access these facilities. The second is available whenever a particular pre-programmed object is selected, and brings up a window providing more or less detailed information about that object. At the least this window will show the formulas used by the program to create the object, and thus in particular how the object depends on the nine parameters aa, bb, \dots, ii . This is all what is required in order to see how to change the parameters. But in addition, as our time and knowledge permit, we will gradually add more remarks explaining salient or interesting features of the various objects. At present, for some categories most objects have some of their interesting properties explained, but in each category at least some such explanations are given.

More detailed instructions on how to use the various options of the program are given in later Help panels. There is also fuller hypertext documentation written in HTML that can be read with your favorite browser by choosing Local HTML Documentation from the Documentation menu