Precalc BC Computer Lab Name:

*Go into the* ***Utilities*** *folder under* ***applications.*** *Open* ***GRAPHER.*** *Select 3-D graphs. You will see “z =” in the equation bar, but you can override this and just type in any equation. For a new equation type: option-command-n, or go to the “equation” menu. There is an equation palette to the right of the equation bar. If you control-click on an equation you can edit its appearance.*

1. Start by verifying your sketches from the *Quadric Surfaces* homework. Go through problems 1 and 2.
2. Next check your answers for problem number 3.
3. Do problem number 4 from the *Intersections* homework (graciously reproduced below):

Describe the intersection of the circular cone, *x2 + y2 = z2*, with each of these:

a) the plane z = 4 b) the plane x = 9 c) the plane x + z = 10

1. a) Show algebraically that the line (2*t*, *t* – 1, *t* + 4) is the intersection of the two planes:  and . *(You need to show that the line gives you a true statement when plugged into each plane equation).*

b) Now verify by graphing. You will have to graph the line as shown below:



1. Now go to the examples menu and play.