Using Complex Numbers on the TI Voyager Calculator

Mode:
Angle—Degree
Exponential Format—Engineering (this makes it easy for you to answer using the proper SI prefixes…milli, micro, kilo, mega, etc.)
Complex Format—Polar

Other things to remember:

1. The "*i*" you enter on your calculator to represent $\sqrt{-1}$ is NOT the "i" from the keyboard. It is the "*i*" that you get to with the 2nd key.
2. Do not enter the degrees symbol (°) when you enter phases for complex numbers.

Try these examples:

1. $(3-i4) + (10\angle 44) = ?$ Ans: 10.6107E0 ∠ 16.1229E0

   Convert this to rectangular:
   ans(1) ▶rect Ans: 10.1934E0 + 2.94658E0 *i*

2. $(22000+i13)/(3\angle -17) = ?$ Ans: 7.33333E3 ∠ 17.0339E0

   Convert this to rectangular:
   ans(1) ▶rect Ans: 7.01163E3 + 2.1482E3 *i*

3. Convert 95 – 12j to polar:
   $(95-12i)$ ▶polar Ans: 97.7459E0 ∠ -7.19923E0