

Summary of Vector Commands on Ti-89

MODE: To change modes, hit the MODE key and then use the \uparrow and \downarrow keys to move to the line you want. Then use the \leftarrow or \rightarrow keys to get a drop-down menu and select the option you want. Hitting ENTER will then change the calculator to that mode.

Angle is assumed to be DEGREE.

Vector Format is assumed to be RECTANGULAR. This means that any vector will automatically be converted to component form unless you override it.

Exact/Approx is assumed to be AUTO. If you enter exact integers, the result will be displayed in exact form (fractions, simplified radicals, etc.). If you enter decimals, you'll get a decimal approximation as your answer. If you get an exact answer and want to override it to display the decimal approximation, just hit the green \blacklozenge key and the ENTER, which is the key combination for \approx (shown in green above the ENTER key).

To get the " \blacktriangleright Polar" and " \blacktriangleright Rect" commands, hit CATALOG, then scroll down the command list. A faster way than just scrolling is to hit CATALOG, then the key that corresponds to the first letter of the command. For example, the " \blacktriangleright Polar" command uses the CATALOG then STO combination, because the purple letter above the STO key is P.

You enter:	Ti gives:
[5,3]	[5 3]
[5, \angle 30] (where 5 = mag, 30° = dir)	$\left[\frac{5 \cdot \sqrt{3}}{2} \quad 5/2 \right]$
[4.2, \angle 42.1]	[3.1163 2.81579] (depending on how many digits you've told it to display)
[5,3] \blacktriangleright Polar (this overrides the MODE – to get this command, hit CATALOG, then STO)	$\left[\sqrt{34} \quad \angle \tan^{-1}(3/5) \right]$ and if you hit \approx , [5.83095 \angle 30.9638]
[8.2,5.5] \blacktriangleright Polar	[9.8737 \angle 33.851]
if you're not in RECTANGULAR mode, you can force the answer to be in components using [5, \angle 30] \blacktriangleright Rect	$\left[\frac{5 \cdot \sqrt{3}}{2} \quad 5/2 \right]$