[6.2] Use rectangular complex mode for faster results

Seemingly simple vector calculations can execute very slowly on the 89/92+ in Polar and Exact or Auto modes. This example

$$\frac{(250\angle 85)*(121\angle 3)}{(250\angle 85)+(121\angle 3)}$$

returns the correct result in less than 1 second in Approx, Degree and Polar modes. However, in Exact or Auto modes, the calculator might seem to 'hang up', but really the answer just takes a long time to calculate. A Texas Instruments TIcares representative offers this explanation.

> *Thank you for your recent correspondence with Texas Instruments. Yes this behavior is possible: We internally calculate with expressions in the rectangular forms that are then converted to a polar form. Converting from a very complicated rectangular form to polar form in the exact or auto mode, can be extraneous on our TI-89 operating systems. Internal complex calculations are done in rectangular form. So, the polar complex numbers are converted to rectangular form. Then, the computation (a * b) / (a + b) is performed. Finally, the resulting rectangular complex number is converted to polar form. It's a difficult process. The result takes about 45 minutes on my TI-89 and looks like this.*
>
> *(30250*sqrt(62500*(cos(3))^2*(cos(5))^4+(125000*(sin(5))^2*(cos(3))^2+60500*sin(5)*cos(3)+14641)*(cos(5))^2+60500*sin(3)*cos(5)+62500*(sin(5))^4*(cos(3))^2+60500*(sin(5))^3*cos(3)+14641*(sin(5))^2+62500*(sin(3))^2)/(60500*sin(3)*cos(5)+60500*sin(5)*cos(3)+77141) < atan((121*cos(5)+250*sin(3))/(250*cos(3)*(cos(5))^2+sin(5)*(250*sin(5)*cos(3)+121))))*
>
> *One of the important lessons in computer algebra is that simple looking input may generate very large exact output and may take a great deal of time to compute. If fast times or small output is desired, it is sometimes best to interrupt a computation and approximate it. The approximate answer (103.416 < 27.1821) is generated in about 1 second.*