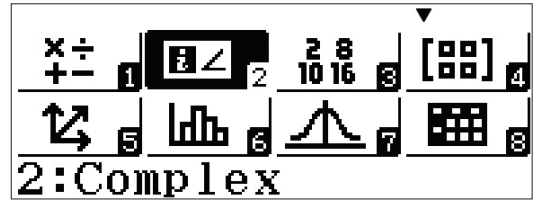


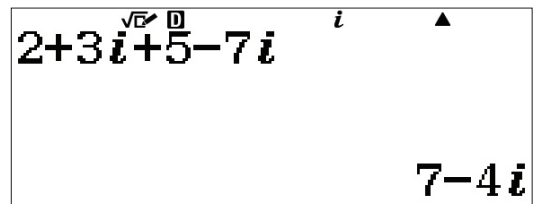
COMPLEX

Complex Number calculations can be executed in the Complex Mode.

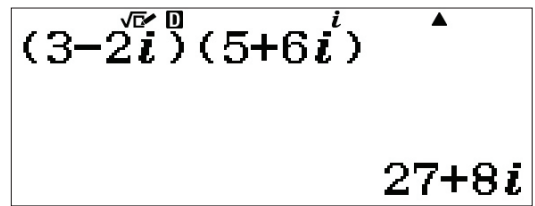
From the Main Menu, use the arrow keys to highlight the Complex icon, then press \square or press \square .



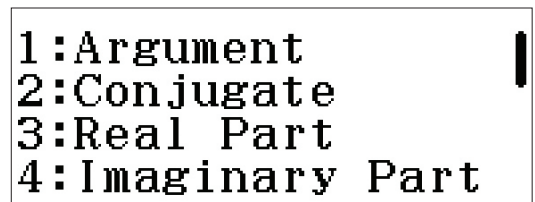
In Complex Mode, operations can be carried out using the imaginary unit (i). To add complex numbers, press \square \square \square \square \square \square \square \square \square .



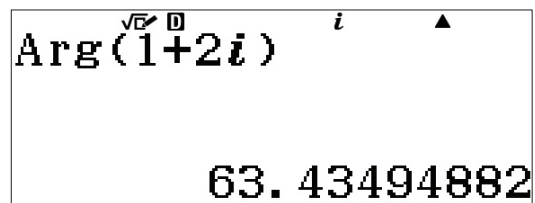
Complex numbers that are multiplied are displayed in complex format. Press \square \square \square \square \square \square \square \square \square \square .



The argument of the complex number $1+2i$, can be found by taking the arctan (y/x) = 63.4349° or by using the Argument command.



Press \square \square (Argument) \square \square \square \square \square \square \square \square .



COMPLEX FORM AND POLAR FORM

To convert a complex number into polar form, press

$\boxed{2} \boxed{+} \boxed{5} \boxed{\text{ENG}} (i) \boxed{\text{OPTN}} \blacktriangledown \boxed{1} \blacktriangleright (r\angle\theta) \boxed{=}$.

1: $\blacktriangleright r\angle\theta$
2: $\blacktriangleright a+bi$

To convert any polar form of a complex number, use the r theta command or type in the angle in polar form.

Press $\boxed{\text{AC}} \boxed{2} \boxed{\text{SHIFT}} \boxed{\text{ENG}} (\angle) \boxed{3} \boxed{3} \boxed{0} \boxed{\text{OPTN}} \blacktriangledown$

$\boxed{2} \blacktriangleright (a+bi) \boxed{=}$.

Alternately, simply type in the angle in polar form by pressing

$\boxed{2} \boxed{\text{SHIFT}} \boxed{\text{ENG}} (\angle) \boxed{3} \boxed{3} \boxed{0} \boxed{=}$.

These calculations can also be accomplished in radian mode.

To change to radian mode, press $\boxed{\text{SHIFT}} \boxed{\text{MENU}} (\text{SET UP}) \boxed{2} (\text{Angle Unit}) \boxed{2} (\text{Radian})$.

$2+5i \blacktriangleright r\angle\theta$
 $\sqrt{29} \angle 68.19859051$

$2 \angle 330 \blacktriangleright a+bi$
 $\sqrt{3}-i$

$2 \angle 330$
 $\sqrt{3}-i$

$2 \angle \frac{11}{6} \pi$
 $\sqrt{3}-i$