Resolver el siguiente problema
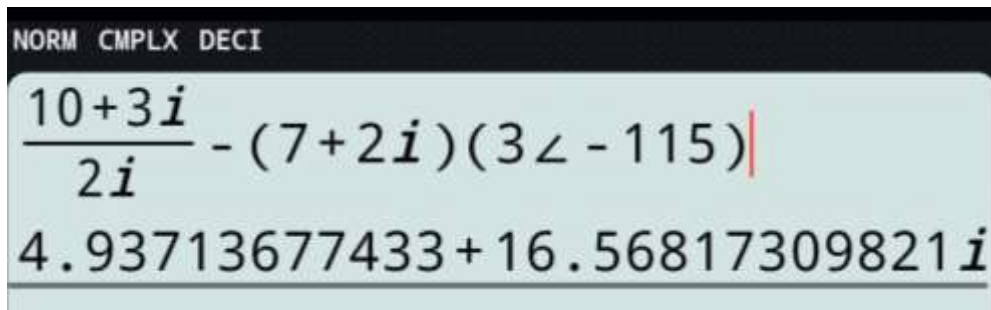
- $\dfrac{10+3j}{2j} - (7+2j)(3\llcorner - 115°) =$

$$\dfrac{(10+3j)(-j)}{2j(-j)} - (7+2j)(-1,26 - 2,71j)$$

$$\dfrac{3-10j}{2} - (-8.82 - 18.9j - 2.52j + 5.4)$$

$$1,5 - 5j - (-3.42 - 21.42j) = 4,92 + 16,42j$$

Forma Rectangular

$$= 4,92 + 16,42j$$
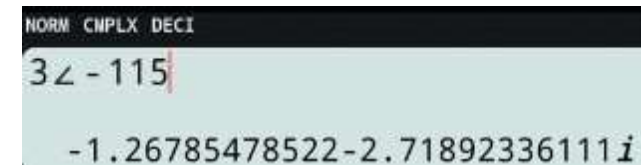


```
NORM  CMPLX  DECI
10+3i
─────  - (7+2i)(3∠-115)|
 2i
4.93713677433+16.56817309821i
```

Polar –> Rectangular

$$3 \llcorner - 115° = r\cos\theta + jr\,sen\,\theta$$

$$= 3(-0.42) + j\,3(-0.90)$$

$$= -1.26 - 2.71\,j$$

```
NORM  CNPLX  DECI
3∠-115|
   -1.26785478522-2.718923361111i
```
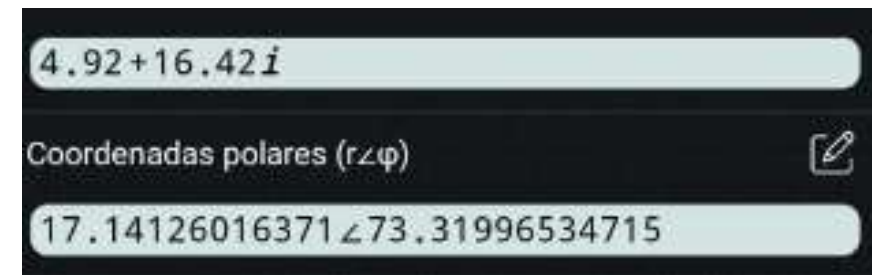
Rectangular -> Polar

$$4,92 + 16,42j = \sqrt{x^2 + y^2} + Arc\,Tang(y/x)$$

$$4,92 + 16,42j = \sqrt{(4,92)^2 + (16,42)^2} + \dfrac{16,42}{4,92}$$

$$13.42 + 24.42j = 17,14 \llcorner 73,31$$

Forma Polar = 17,14 ∟73,31

```
4.92+16.42i

Coordenadas polares (r∠φ)

17.14126016371∠73.31996534715
```

Resolver el siguiente problema

- $6,8 \llcorner 125,3° + \dfrac{4,5 \llcorner -11,5°}{7,6-1,2j}$

$6,35 - 2,41j + \dfrac{2,17 + 3,93j}{7,6 - 1,2j}$

$6,35 - 2,41j + \dfrac{11,77 + 32,47j}{56,32}$

$6,35 - 2,41j + 0,20 + 0,57j$

$CARTESINA = 6,55 - 1,84j$

$6.8 \angle 125.3 + \dfrac{4.5 \angle -11.5}{7.6 - 1.2i}$

$6.55452780839 - 1.86919822457i$

Polar $\rightarrow$ Rectangular

$6,8 \llcorner 125,3° = 6,8cos(125,3) + 6,8sen(125,3)$

$6.8 \llcorner 125.3° = 6.35 - 2.41i$

Convertir $(6.8, 125.3)$ a coordenadas cartesianas: $(6.35517\ldots, -2.41903\ldots)$

$4,5 \llcorner -11,5° = 4,5cos(-11,5) + 4,5sen(-11,5)$

$4,5 \llcorner -11,5° = 2,17 + 3,93j$

Convertir $(4.5, -11.5)$ a coordenadas cartesianas: $(2.17487\ldots, 3.93953\ldots)$

Rectangular $\rightarrow$ Polar

$6,55 - 1,86j = \sqrt{x^2 + y^2} + Arc\ Tang(y/x)$

$6,55 - 1,86j = \sqrt{6,55^2 + (-1,86)^2} + arc\ Tang(\dfrac{-1,86}{6,55})$

$POLAR = 6,8 \llcorner -0,27$

$6.80897202227 \angle -0.27668578104$

Resolver el siguiente problema

- $\dfrac{34+28,5j}{4\llcorner-20,8°} - 51,2\llcorner215°$

$$\dfrac{34+28,5j}{-1,48-3,71j} - 10,12 - 50,18j$$

$$\dfrac{-156,05+83,96j}{15,95} - 10,12 - 50,18j$$

$$-9,78 + 5,26j - 10,12 - 50,18j$$

$$RECTANGULAR = -19,9 - 44,91j$$

$\dfrac{34+28.5i}{4\angle-20.8} - 51.2\angle215$

$-19.89425140387 - 44.93$

Polar $->$ Rectangular

$$-51,2\llcorner215° = -51,2\cos(215) + 51,2\operatorname{sen}(215)$$

$$-51,2\llcorner215° = -10,12 - 50,18j$$

Convertir $(-51.2,\ 215)$ a coordenadas cartesianas: $(-10.12654\ldots,\ -50.18857$

$$4\llcorner-20,8° = 4\cos(-20,8) + 4\operatorname{sen}(-20,8)$$

$$4\llcorner-20,8° = -1,48 - 3,71j$$

Convertir $(4,\ -20.8)$ a coordenadas cartesianas: $(-1.48237\ldots,\ -3.71518\ldots$

Rectangular $->$ Polar

$$-19,9 - 44,91j = \sqrt{(-19,9)^2+(-44,91)^2} + arc\,Tang\left(\dfrac{-44,91}{-19,9}\right)$$

$$POLAR = 49,12\llcorner1,15$$