

## Mathematics - Complex - Exercises

- 01
- Express the complex number  $(-3-4i)$  in trigonometric form.
  - Express the complex number  $3e^{i3\pi/4}$  in rectangular form.
  - Sketch the location of the complex number  $8e^{i\pi}$  on the complex plane.
  - On the complex plane, sketch the graphical addition of the following numbers:  
 $-1 + 2i$  and  $3 - i$

02 Perform the following mathematical operations:

- $(3-2i)/(2-3i)$
- $(3e^{i\pi})(-4e^{-i\pi})$
- $[2(\cos 3\pi/4 + i\sin 3\pi/4)]^4$
- $[16(\cos 3\pi/4 + i\sin 3\pi/4)]^{1/4}$