3Aug

August 3, 2020

```
[13]: from fractions import Fraction
      f= Fraction(2,5)
      print(f)
      e=f+1.5
      print(e)
     2/5
     1.9
 [2]: print(f)
     2/5
 [1]: 2**3
 [1]: 8
 [2]: import math
      math.sin(78)
 [2]: 0.5139784559875352
 [3]: 1+ 2j
 [3]: (1+2j)
 [5]: s=(1+2j)*(2-9j)
 [6]: import cmath
      print(cmath.polar(s)) #Into polar
     (20.615528128088304, -0.24497866312686414)
 [7]: print(cmath.exp(s)) #Euler's Formula
     (137623019.64063433+465236683.10013294j)
 [8]: s.conjugate()
```

```
[8]: (20+5j)
[9]: abs(s)
[9]: 20.615528128088304
[10]: ((s.real)**2 + (s.imag)**2)**0.5
[10]: 20.615528128088304
[11]: 3+5j
[11]: (3+5j)
[12]: 2+3j/3-5j
[12]: (2-4j)
[1]: (2-4j)
```