When a class has a **str** method, it can be printed!

In [9]:
```
sx = str(z)
print(sx, ' is str? ', isinstance(sx, str))
```

```
1.4142135623730951e^0.7853981633974484  is str?  True
```

Exercises

Só este é imprescindible →

1. Finish the implementation of a class *Complex*. Consider first the methods you want for this class, then implement them.
2. Implement class *Vector* and *Matrix* using python lists. First define the attributes and methods, then define a set of test-functions to verify the code, implement the methods and finally ensure that they pass your tests.
3. Define a class for 1D histogram. Define its attributes and methods. Implement them.
4. Define a class for a bank account and its movements. Define a class for a bank holding several bank accounts. Define its attributes and methods.

Appendix:

You can convert your object into a dictionary with the atrributes names as keys of a dictionary with the functions *vars*

In [10]:
```
xdata = vars(x)
print(xdata)
```

```
{'mod': 1.0, 'phase': 0}
```

You can also set and get the atrributes via the name using: *getattr*, *setattr*

In [11]:
```
setattr(x, 'mod', 2)
print(x)
setattr(x, 'phase', math.pi/2)
print(x)
```

```
2e^0
2e^1.5707963267948966
```