$$y = log(x)$$

```
from math import log
x = float (input("Ingrese x:"))
if x<=0:
  print ("No esta definido")
else:
  y=log(x)
  print("y es: {:.3f}".format(y))
```

```
    Ingrese x:12
    y es: 2.485
```

$$y = log(\sqrt{x})$$

```
x = float (input("Ingrese x:"))
if x<=0:
  print ("No esta definido")
else:
  y=log(x**(1/2))
  print("y es: {:.3f}".format(y))
```

```
    Ingrese x:3
    y es: 0.549
```

$$y = log(\sqrt{x^2 - 1})$$

```
x = float (input("Ingrese x:"))
if (x<=1) and (x>=-1):
  print ("No esta definido")
else:
  y=log((x**(2)-1)**(1/2))
  print("y es: {:.3f}".format(y))
```

```
    Ingrese x:5
    y es: 1.589
```

$$y = \frac{log(\sqrt{x - 1})}{x^2 + 1}$$

```
x = float (input("Ingrese x:"))
if (x<=1):
  print ("No esta definido")
else:
```

```
  y=(log((x-1)**(1/2))/(x**2+1))
  print("y es: {:.3f}".format(y))

     Ingrese x:7
     y es: 0.018
```

$$y = \frac{x-1}{log(x)}$$

```
x = float (input("Ingrese x:"))
if (x<0):
  print ("No esta definido")
else:
  y=((x-1)/(log(x)))
  print("y es: {:.3f}".format(y))

     Ingrese x:2
     y es: 1.443
```

$$y = \frac{1}{x} + \sqrt{x-1}$$

```
from math import pow
x = float (input("Ingrese x:"))
if (x<=0):
  print ("No esta definido")
else:
  y=(1/x + pow(x-1,1/2))
  print("y es: {:.3f}".format(y))

     Ingrese x:4
     y es: 1.982
```

$$y = \frac{1}{x} + \sqrt{x-1} - \frac{1}{log\left(\frac{1}{x+1}\right)}$$

```
x = float (input("Ingrese x:"))
if (x<1):
  print ("No esta definido")
else:
  y=((x-1)/(log(x)))
  print("y es: {:.3f}".format(y))
```

$$y = \frac{2}{x^2+1}$$

```
x = float (input("Ingrese x:"))
y=(2/(pow(x,2)+1))
print("y es: {:.3f}".format(y))
```

```
Ingrese x:2
y es: 0.400
```

$$A = log_{10} \frac{1}{T}$$

```
T = float (input("Ingrese T:"))
A=(log(1/T))
print("A es: {:.3f}".format(A))
```

```
Ingrese T:2
A es: -0.693
```

$$y = \frac{1}{n} \sum_{i=1}^{n} x_i$$

$$z = \frac{1}{n-1} \sum_{i=1}^{n} (x_i - \bar{x})^2$$

$$m = \frac{\sqrt{z}}{y}$$