

```
def f(x):
    return(x**2-2)
def dichot(f,a,b,p):
    A=a;B=b;
    while B-A>p:
        m=(A+B)/2;
        if f(a)*f(m)<0:
            B=m;
        else:
            A=m;
    return(A)
```

```
from math import *
def f(x):
    return(x**2-3)
def df(x):
    return(2*x)

def Newton(f,df,x0,p):
    x=x0;
    y=x- f(x)/df(x);
    while abs(y-x)>p:
        x=y;
        y=y-f(y)/df(y)
    return(y)

>>> sqrt(3)
1.7320508075688772
>>> Newton(f,df,1,0.00001)
1.7320508075688772
```