

```

module mod_newton
  public::newton
contains
subroutine newton(x0,niter,preci,x)
  use mod_funcion
  use mod_derivada
  real,intent(inout)::x0,preci
  integer,intent(in)::niter
  real,intent(out)::x
  integer::i

  do i=1,niter
    x=x0-f(x0)/df(x0)
    if(abs(x-x0)<preci .or. abs(f(x))<preci) then
      print*,"Raiz:",x
      exit
    end if
    x0=x
  end do
  if (i>=niter) then
    print*,"No se han encontrado raices."
  end if
end subroutine newton
end module mod_newton

```