
```
fun1 = @(x)cos(x)-x;
[res1,a,b] = newton(fun1,pi/4,1e-6,1e-4,10);

fun2 = @(x)exp(-x) - sin(x);
[res2,a,b] = newton(fun2,.6,1e-6,1e-4,10);

fun3 = @(x)x-exp(-x);
[res3,a,b] = newton(fun3,.5,1e-6,1e-4,10);

fun4 = @(x)x^2-2*x*exp(-x)+exp(-2*x);
[res4,a,b] = newton(fun4,.5,1e-6,1e-4,10);
disp('res1')
disp(res1)
disp('res2')
disp(res2)
disp('res3')
disp(res3)
disp('res4')
disp(res4)

res1
    0.739085178106010

res2
    0.588532742847979

res3
    0.567143165034862

res4
    0.566605704128158
```

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