

MATLAB R2016a - student use

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```
1 %Triangle Potential
2 close all;
3
4 % airy function
5 Ai=@(x) airy(x);
6 Bi=@(x) airy(2,x);
7
8 % derivative
9 h=1e-6;
10 Ai1=@(x) (airy(x+h)-airy(x-h))/(2*h); %Ai'
11 Bi1=@(x) (airy(2,x+h)-airy(2,x-h))/(2*h); %Bi'
12
13
14 % % Plot
15 % figure; hold on; grid on
```

Workspace

Name	Size
A	1x1
Ai	1x1
Ai1	1x1
ans	1x7
b	2x1
bD	2x1
Bi	1x1
Bi1	1x1
C	2x1
C1	1x1
C2	1x1
D	2x1
D1	1x1
D2	1x1
E	1x1
E0	1x6
f	1x1
g	1x1
gh	1x1
h	1x1
ii	1x1
jj	1x1
k	1x100
Mat	2x2
matC	2x2
matD	2x2
Nplot	1x1
Nx	1x1
phi	1x1000
t1	1x1

Command Window

```
>> TrianglePotential
all energy levels for bound states
Columns 1 through 5

-0.825024991019182 -0.598436376438696 -0.442135746657150

Column 6
```