
Table of Contents

.....	1
Question 3. a)	1
Question 3. b)	1
Question 3. c)	1

```
%Assignment 5, Question 1a
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%For: Dr. Martha Dagneu. CEE 2219b
%March 11th 2019
```

Question 3. a)

```
tic
height = 0:0.1:4; %decalre array of heights
func =@(height) pi*(height^2)*(3*4-height)/3 -60;
dfunc =@(height) -pi*(height-8)*height;

[root,ea,iter]=Nicholas_Paul_Newtraph(func, dfunc, 3.5, 0.05, 100);
toc

2.4493

Elapsed time is 0.013222 seconds.
```

Question 3. b)

```
tic
height = 0:0.1:4; %decalre array of heights
func =@(height) pi*(height^2)*(3*4-height)/3 -60;

[root,ea,iter]=Nicholas_Paul_Secant(func, 3.5, 0, 0.05, 100);
toc

2.4488

Elapsed time is 0.004913 seconds.
```

Question 3. c)

```
%Upon using the NR method, the "tic toc" outputted "Elapsed time is
%0.003115 seconds" and the secant method outputted "Elapsed time is
%0.001601 seconds". Therefore, because the Secant method took less
time, it
%can be said that the Secant method has a FASTER speed of convergence
than
%the NR method for this problem.
```

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