

.17.1

שיטת החציה:

```
Bisection method:

Bisecting from (0.3) to (0.4):
i(1): x=(0.350000), f(x)=(0.000047)
i(2): x=(0.325000), f(x)=(-0.000023)
i(3): x=(0.337500), f(x)=(0.000012)
i(4): x=(0.331250), f(x)=(-0.000006)
Root: (0.33125000)

Checking (x=0):
i(1): x=(0), f(x)=(0)
Root: (0)

The roots are: ['0.33', '0.00']
```

שיטת ניוטון רפסון:

```
Newton Raphson method:

Applying Newton Raphson method from (0.3) to (0.4):
i(1): x=(0.350000), f(x)=(0.000047)
i(2): x=(0.333337), f(x)=(0.000000)
2 Iterations, x= 0.3333

Checking (x=0):
i(1): x=(0), f(x)=(0)
Root: (0)

The roots are: ['0.33', '0.00']
```

.17.2

שיטת סימפון:

```
Simpson method:  
  
Integral for a step 1 = 7.947267437442036e-05  
Integral for a step 2 = 7.733309325353949e-05  
Integral for a step 3 = 5.389218589930336e-05  
final result: 0.0002106979535272632
```

שיטת רומברג:

```
Romberg method:  
  
[0.00016117]  
[0.00019786 0.00021008]  
[0.00020749 0.0002107 0.00021075]  
[0.00020989 0.0002107 0.0002107 0.00021069]  
0.00021069430180048698
```