

# Answer For Hw2

## Problem 1 Solution

- for\_loop

method1:

10.7461	9.6502	9.0870
11.3660	10.3219	9.8011
12.0017	11.0109	10.5322
12.6524	11.7158	11.2784
13.3174	12.4352	12.0376
13.9959	13.1679	12.8083
14.6870	13.9126	13.5889
15.3900	14.6680	14.3780
16.1042	15.4331	15.1743
16.8288	16.2068	15.9768
17.5630	16.9882	16.7845

- vectorize

method2:

10.7461	9.6502	9.0870
11.3660	10.3219	9.8011
12.0017	11.0109	10.5322
12.6524	11.7158	11.2784
13.3174	12.4352	12.0376
13.9959	13.1679	12.8083
14.6870	13.9126	13.5889
15.3900	14.6680	14.3780
16.1042	15.4331	15.1743
16.8288	16.2068	15.9768
17.5630	16.9882	16.7845

## Problem 2 Solution

- gcd :

In: (0,2)

Out:2

In: (0,0)

out:0

In: (12,4)

Out:4

- lcm :

In: (12,90)

Out:180

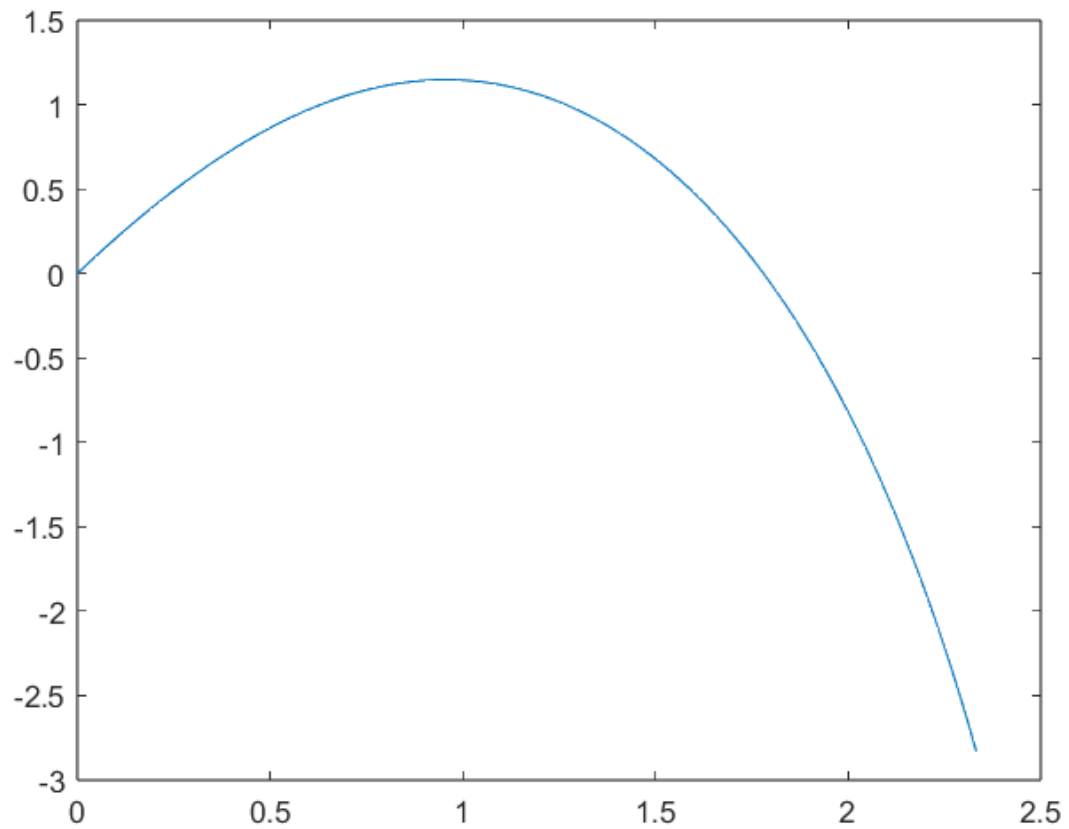
## Problem 3 Solution

Narcissistic number:

153    370    371    407

## Problem 4 Solution

- plot :



## Problem 5 Solution

- cleanup:

```
Out:5.0000    NaN    NaN    NaN    3.4000    2.0000    8.0000
NaN
```

- nearZero :

```
Out:8
```

- Nearest :

```
Out:1 3
```