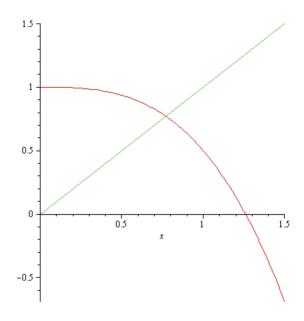
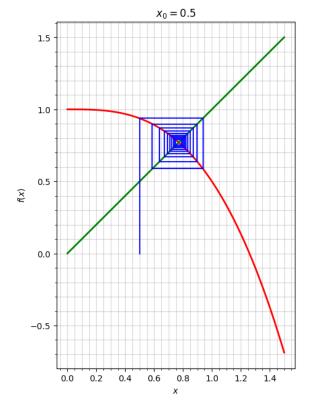
## **Homework 4: Cobweb Graph**

By Romrawin Chumpu 639506093

การบ้านครั้งที่ 4



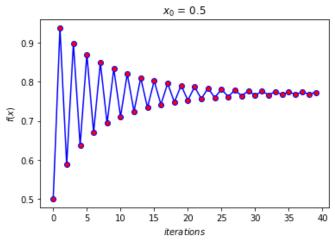
จงเขียน Cobweb Graph ของกราฟข้างต้น  $x_{n+1} = 1 - \frac{x_n^3}{2}$  โดยใช้  $x_0 = 0.5$ 



## Coweb graph

Set 40 iterations

The last iteration values is 0.7729413525996853



## Print the iteration destinations

```
Iteration: 1
from (0.50000, 0.93750) to (0.93750, 0.93750)
from (0.93750, 0.93750) to (0.93750, 0.58801)
Iteration: 3
from (0.93750, 0.58801) to (0.58801, 0.58801)
from (0.58801, 0.58801) to (0.58801, 0.89834)
Iteration: 5
from (0.58801, 0.89834) to (0.89834, 0.89834)
from (0.89834, 0.89834) to (0.89834, 0.63751)
Iteration: 7
from (0.89834, 0.63751) to (0.63751, 0.63751)
from (0.63751, 0.63751) to (0.63751, 0.87045)
Iteration: 9
from (0.63751, 0.87045) to (0.87045, 0.87045)
from (0.87045, 0.87045) to (0.87045, 0.67023)
Iteration: 11
from (0.87045, 0.67023) to (0.67023, 0.67023)
from (0.67023, 0.67023) to (0.67023, 0.84946)
Iteration: 13
from (0.67023, 0.84946) to (0.84946, 0.84946)
from (0.84946, 0.84946) to (0.84946, 0.69352)
Iteration: 15
from (0.84946, 0.69352) to (0.69352, 0.69352)
from (0.69352, 0.69352) to (0.69352, 0.83322)
Iteration: 17
from (0.69352, 0.83322) to (0.83322, 0.83322)
from (0.83322, 0.83322) to (0.83322, 0.71077)
Iteration: 19
from (0.83322, 0.71077) to (0.71077, 0.71077)
from (0.71077, 0.71077) to (0.71077, 0.82046)
Iteration: 21
from (0.71077, 0.82046) to (0.82046, 0.82046)
from (0.82046, 0.82046) to (0.82046, 0.72385)
Iteration: 23
from (0.82046, 0.72385) to (0.72385, 0.72385)
from (0.72385, 0.72385) to (0.72385, 0.81037)
Iteration: 25
from (0.72385, 0.81037) to (0.81037, 0.81037)
from (0.81037, 0.81037) to (0.81037, 0.73392)
Iteration: 27
from (0.81037, 0.73392) to (0.73392, 0.73392)
from (0.73392, 0.73392) to (0.73392, 0.80234)
Iteration: 29
from (0.73392, 0.80234) to (0.80234, 0.80234)
from (0.80234, 0.80234) to (0.80234, 0.74174)
Iteration: 31
from (0.80234, 0.74174) to (0.74174, 0.74174)
from (0.74174, 0.74174) to (0.74174, 0.79595)
```

```
Iteration: 33
from (0.74174, 0.79595) to (0.79595, 0.79595)
from (0.79595, 0.79595) to (0.79595, 0.74787)
Iteration: 35
from (0.79595, 0.74787) to (0.74787, 0.74787)
from (0.74787, 0.74787) to (0.74787, 0.79086)
Iteration: 37
from (0.74787, 0.79086) to (0.79086, 0.79086)
from (0.79086, 0.79086) to (0.79086, 0.75268)
Iteration: 39
from (0.79086, 0.75268) to (0.75268, 0.75268)
from (0.75268, 0.75268)
```