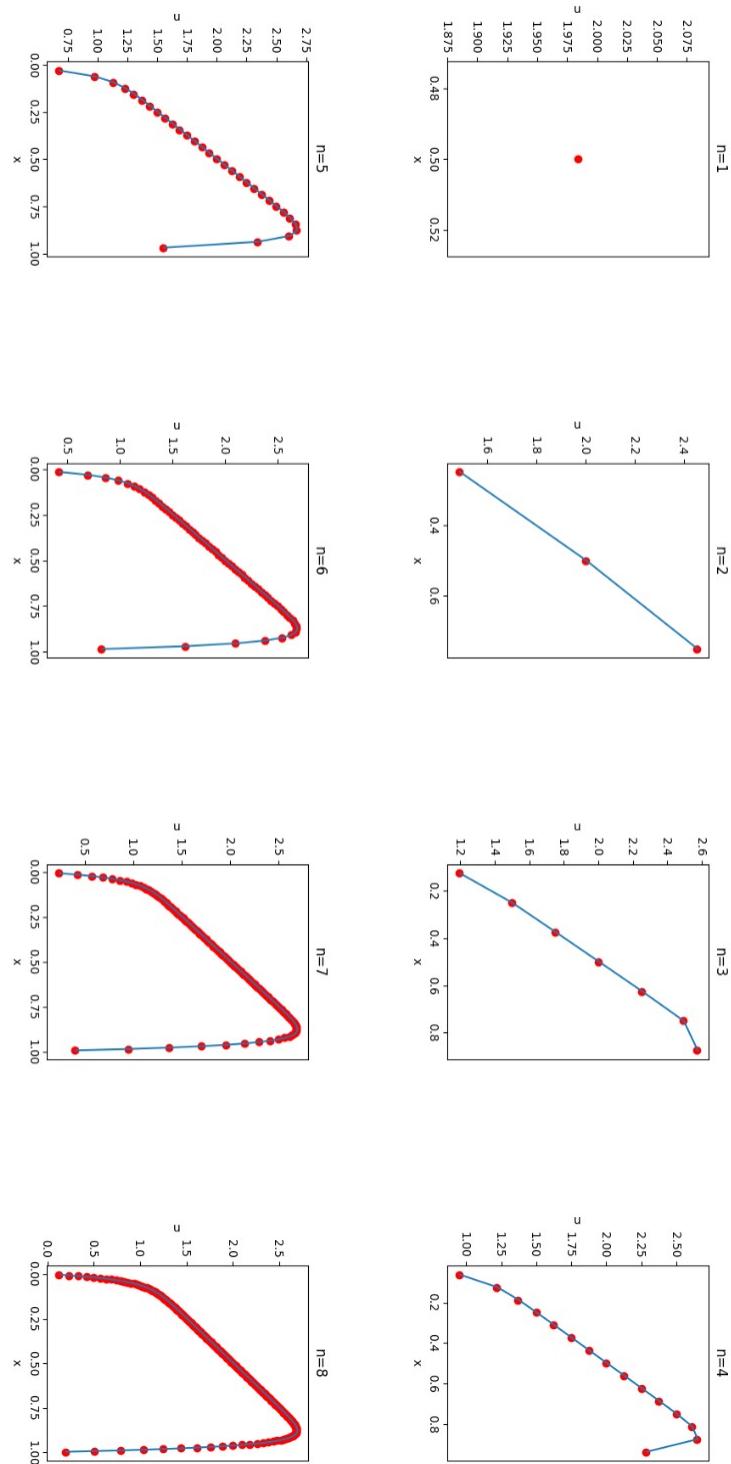


MATH 609
Anthony Barcio

Code for qs. 4 and 5 is available in relevant folder at <https://github.com/ajbarcio/609HWs.git>
Use main branch

4. Plotted results:



5a.

```
L = [[ 1.41421356  0.          0.          0.          ]
      [-0.70710678  1.22474487  0.          0.          ]
      [ 0.          -0.81649658  1.15470054  0.          ]
      [ 0.          0.          -0.8660254   1.11803399]]
L.T = [[ 1.41421356 -0.70710678  0.          0.          ]
        [ 0.          1.22474487 -0.81649658  0.          ]
        [ 0.          0.          1.15470054 -0.8660254 ]
        [ 0.          0.          0.          1.11803399]]
```

5b.

```
L = [[1.          0.          0.          0.          ]
      [0.5         0.28867513  0.          0.          ]
      [0.33333333 0.28867513  0.0745356  0.          ]
      [0.25        0.25980762  0.1118034   0.01889822]]
L.T = [[1.          0.5         0.33333333  0.25        ]
        [0.          0.28867513  0.28867513  0.25980762]
        [0.          0.          0.0745356   0.1118034 ]
        [0.          0.          0.          0.01889822]]
```