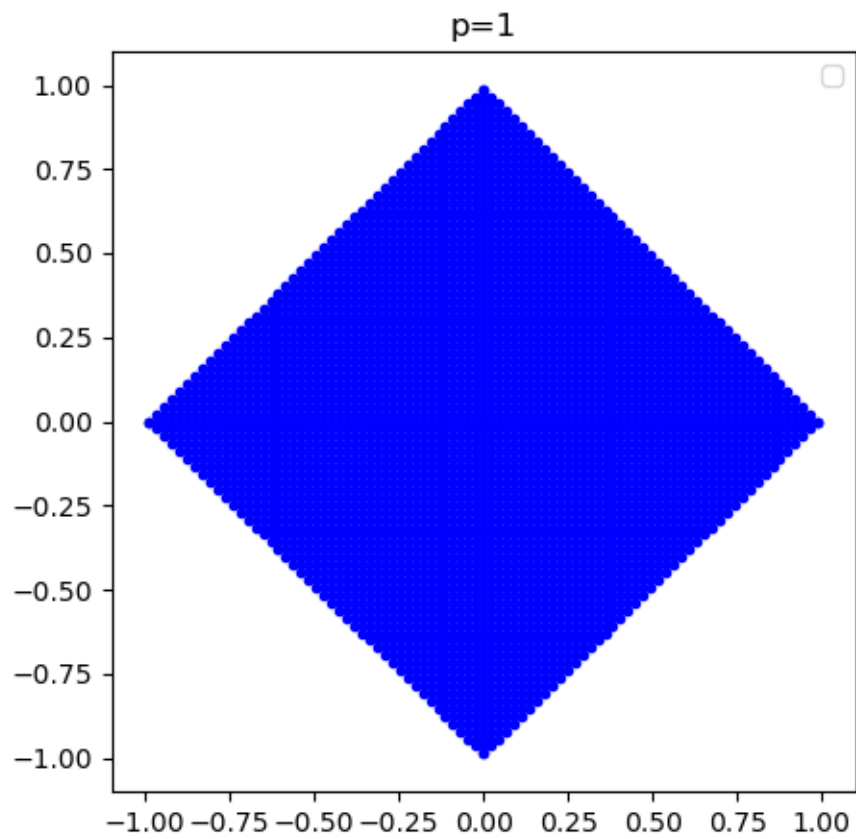
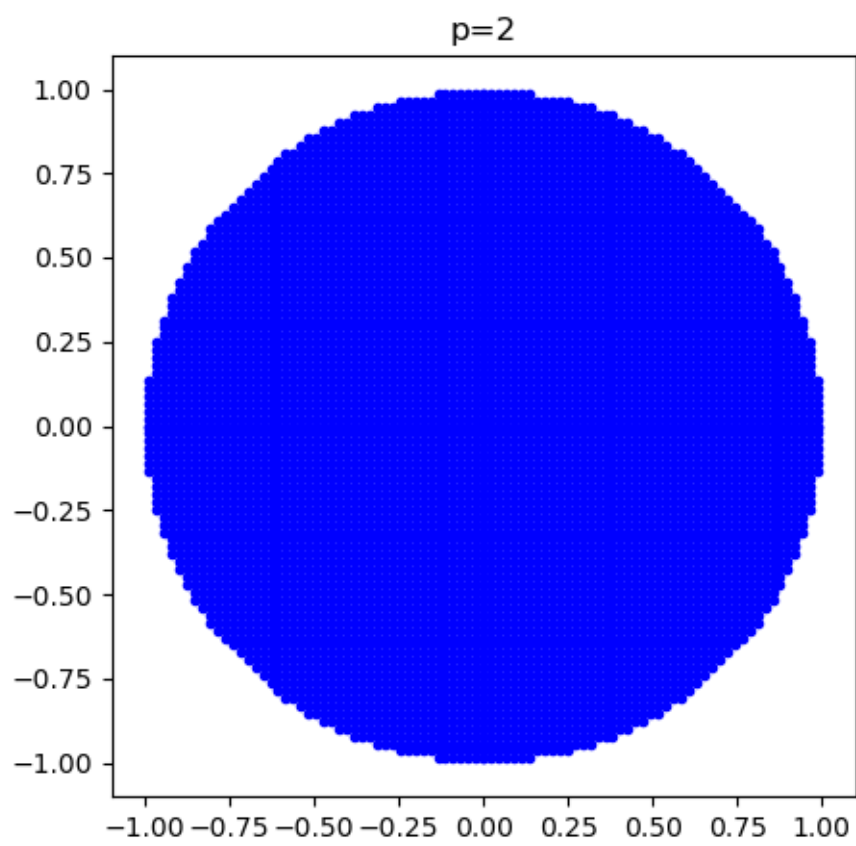
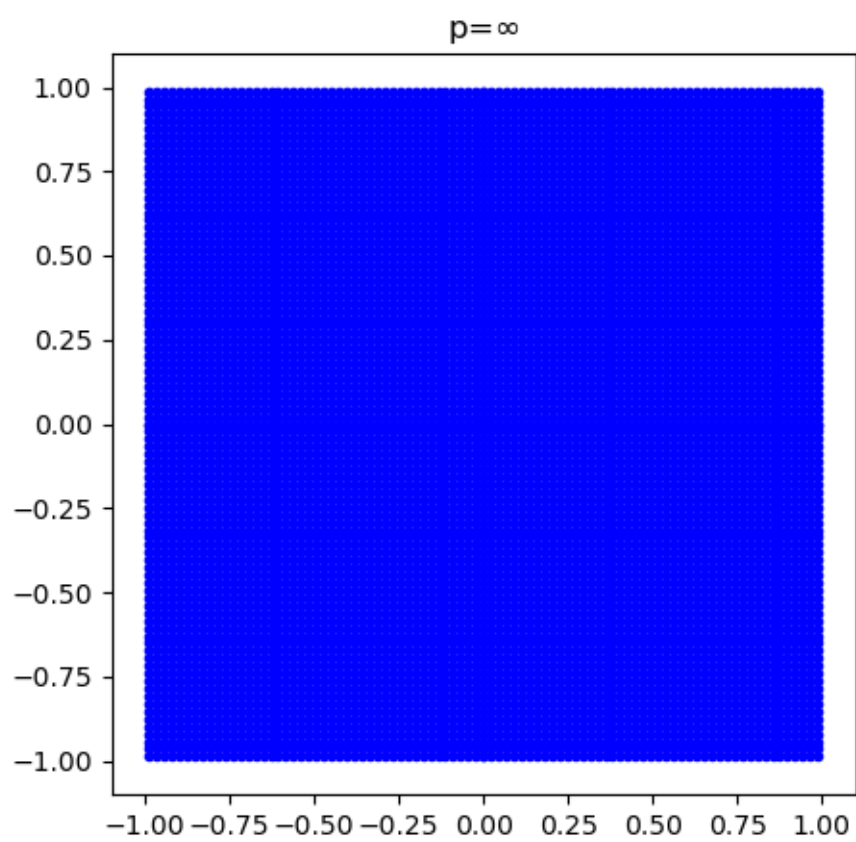


Oppgave 1 c)

Under følger bildene for $p = 1$, $p = 2$ og $p = \infty$. p ble endret mellom hver gang koden ble kjørt.







Kode

Under ligger koden brukt for å plotte oppgaven.

```
import numpy as np
from numpy.linalg import norm
import matplotlib.pyplot as plt
numberlist = np.linspace(0, 1.1, num=50)

p = np.infty
plt.figure(figsize=(5,5))
for x in numberlist:
    for y in numberlist:
        nx = norm([x,y],p)
        if nx<=1:
            plt.plot([x], [y], marker='o', markersize=3, color="b")
            plt.plot([-x], [y], marker='o', markersize=3, color="b")
            plt.plot([x], [-y], marker='o', markersize=3, color="b")
            plt.plot([-x], [-y], marker='o', markersize=3, color="b")
plt.title("p=$\infty$")
plt.ylim(-1.1, 1.1)
plt.xlim(-1.1,1.1)
plt.show()
```