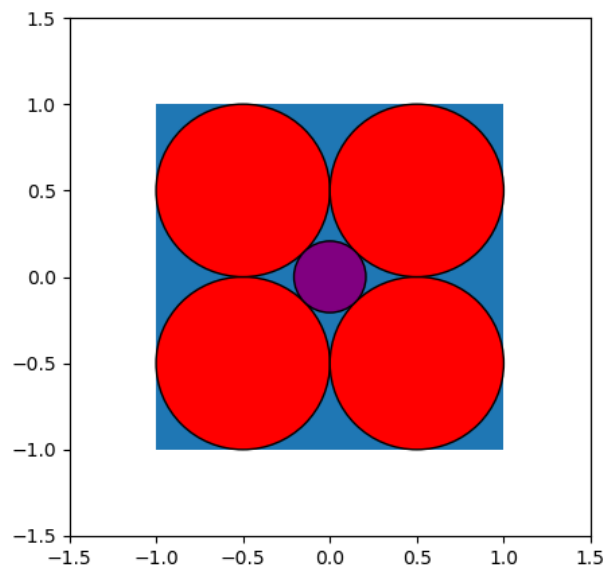


Exercise 1

(a)

Situation for $l=2$ and $s=2$:

$$Q_{2,2} = \{[x_1 x_2]^T \in \mathbb{R}^2 \mid |x_i| \leq 1 \text{ for all } i = 1, 2\} = [-1, 1]^2$$



(b)

Exercise 2

(a)

(b)

Exercise 3

(a)

(b)

(c)

(d)

Exercise 4

(a)

(b)

(c)

(d)

(e)

Exercise 5