Problem 1.1 (S1)

a)

b)

Problem 1.2 (S1)

I didn't explain why a set is a proper subset of another set.

a)
- [x] True
- [ ] False

since order does not matter in sets and repeated elements are ignored.

b)
- [ ] True
- [x] False

The element $\{1,3\}$ does not exist in P

c)
- [x] True
- [ ] False

since order does not matter in sets and Q contains the elements 2 and 1, $\{2,1\}$ is a subset of Q.

Since Q contains elements that are not in $\{2,1\}$, therefore $\{2,1\}$ is a proper subset of Q

Problem 2.1 (S2)

a)

$\{ \square, \square, \square, \square, \square, \square, \square, \square \}$ Cardinality:

b)

$\{ \square, \square, \square, \square, \square, \square, \square, \square \}$ Cardinality:

c)

$\{ (\ \ ,\ \ ), (\ \ ,\ \ ), (\ \ ,\ \ ), (\ \ ,\ \ ), (\ \ ,\ \ ), (\ \ ,\ \ ), (\ \ ,\ \ ), (\ \ ,\ \ ) \}$ Cardinality:

Problem 2.2 (S2)

Problem 3 (S3)

a)

- ☐ Property 1
- ☐ Property 2
- ☐ Property 3
- ☐ Property 4

b)

- ☐ Property 1
- ☐ Property 2
- ☐ Property 3
- ☐ Property 4