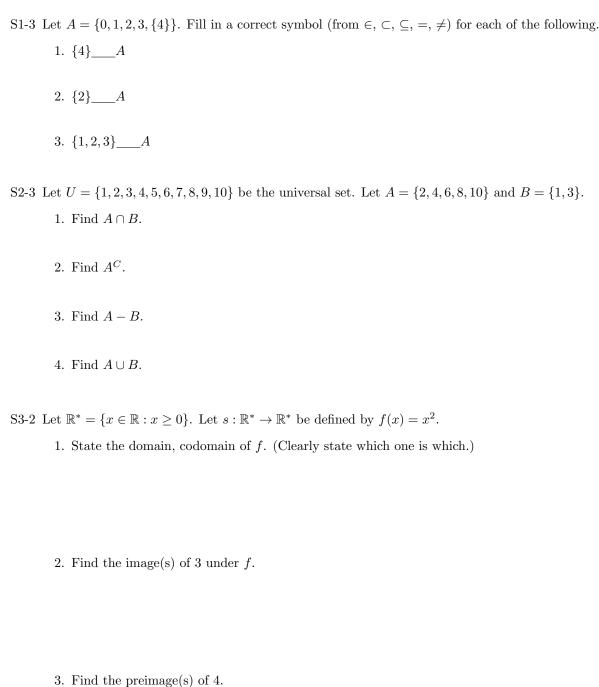
Skill Mastery Quiz 10

Communicating in Math (MTH 210-01) Winter 2020

Name:



S4-1	Let 2	A and B be sets.	Carefully	complete t	he definit	tions of tl	ne followi	ng terms.	(Note:	"no collisions"
	and	"range=codomain	" are help	oful ways to	o think a	bout thes	e, but the	ey are NO	T the c	definitions.)

- 1. A function $f:A\to B$ is injective provided that...
- 2. A function $f:A\to B$ is surjective provided that...
- 3. A function $f:A\to B$ is bijective provided that...

- S6-1 Let $r, s \in \mathbb{Z}$ and $n \in \mathbb{N}$. State the definitions of the following:
 - $-r \mid s$ (for nonzero r)
 - $-r \equiv s \pmod{n}$.

Give an example of integers a and b such that $a \equiv b \pmod{15}$ and b < 0.