

Problem Set 0 Solution

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Question 1

- Solution complete. Please see above

Question 2

- CSC 165
- Mathematical Expression and Reasoning for Computer Science
- David Liu

Question 3

- $S_1 = \{ x \mid x \in \mathbb{Z}, x < 30 \}$
 $S_2 = \{ 0, 1, 9, 10, 11, 19, 20, 21, 29, 30, 31 \dots \}$
So,
 $S_1 \cap S_2 = \{ 0, 1, 9, 10, 19, 20, 21, 29 \}$

Question 4

p	q	r	$\neg q$	$p \vee \neg q$	$p \iff r$	$(p \vee \neg q) \Rightarrow (p \iff r)$
T	T	T	F	T	T	T
T	T	F	F	T	F	F
T	F	T	T	T	T	T
F	T	T	F	F	F	T
T	F	F	T	T	F	F
F	T	F	F	F	T	T
F	F	T	T	T	F	F
F	F	F	T	T	T	T

Question 5