

- 1) We need to flip the card with the number 8 and the blue card.
- We need to check the card with the number 8 is blue on the other side.
 - We need to check the blue card if the other side is an even number.

2) This statement is false:
If I eat vegetable soup, you'll not give me sour cream.

If I eat vegetable soup, then you'll give me sour cream

$p =$ I eat vegetable soup

$q =$ you'll give me sour cream

This statement is false:

If learning assistants are not CLAP-certified then they must not register for UNI STU 176.

If learning assistants are not CLAP-certified, then they must register for UNI STU 176.

$p =$ Learning assistants are not CLAP-certified

$q =$ Learning assistants must register for UNI STU 176

- 3) By applying De Morgan's Law
The correct statements for
children who must use a car seat are
 p : Children who are younger than 8 years old
and
 q : child less than 4 feet 9 inches tall

By comparing to what is written on CA
Driver's Handbook, we find:

- 1) Children who are 8 years old are included
which it should not
- 2) It should use p and q but it used
 p or q

There are two mistakes.

- 4) w : This person is with us
 A : This person is against us

who is with us is not against us

$$w \rightarrow \neg A$$

who is against us is not with us

$$A \rightarrow \neg w$$

\rightarrow	$w \rightarrow \neg A$	start
{	$\neg w \vee \neg A$	conditional identity
	$\neg A \vee \neg w$	commutative law
	\rightarrow	$A \rightarrow \neg w$

\therefore They are logically equivalent