

# MA-236: Homework 3

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I pledge my honor that I have abided by the Stevens Honor System.

## 1.18 Problems

(6.d) "It's false that if Min is home, she's on board, because if she's home, she's not on board."

Atomic Sentences:

A: Min is home

B: Min is on board

$$\frac{A \rightarrow \neg B}{\neg(A \rightarrow B)}$$

$A$	$B$	$A \rightarrow \neg B$	$\neg(A \rightarrow B)$
t	t	f	f
t	f	t	t
f	t	t	f
f	f	t	f

This argument is **not valid** because there are two counter examples where the premise is true and the conclusion is false.