

# 1-7 Logical Reasoning

## • Conditional Statements

A statement that can be written in if, then form

(ex.) If the popcorn burns,  
then it cooked too long.  
hypothesis  
conclusion

(ex.) If  $x=2$ , then  $3x=6$ .

H:  $x=2$

C:  $3x=6$

Write an if-then statement and state the hypothesis and conclusion.

(ex.) I will go to the football game with you on Friday.

If it is Friday, then I will go to the football game with you.

- Counterexample: a statement that can prove a conditional statement false.

(ex.) If u are using the Internet, then you are on a computer.

Counterexamples: phone, tv, ipad

HW

- ① Create 2 conditional statements. (If..., then...)
- ② Name/Identify the hypoth. & conclusion for each.
- ③ Write a counterexample for each.