

# Geometry – Deductive Reasoning

## YAY MATH!

Students will be able to complete the following problems after watching the video:

Draw an additional conclusion from the following two statements, and state which law was used:  
(Law of Syllogism or Law of Detachment)

If the heat wave continues, then more AC used.  
If more AC used, then energy costs higher.

Conclusion: \_\_\_\_\_

Law used: \_\_\_\_\_

If 2  $\angle$ 's are complementary, then they sum to  $90^\circ$ .  
If angles sum to  $90^\circ$ , then both angles are acute.

Conclusion: \_\_\_\_\_

Law used: \_\_\_\_\_

If the heat wave continues, then more AC used.

- The heat wave continues. Thus? \_\_\_\_\_
- More AC used. Thus? \_\_\_\_\_

If I live in Los Angeles, then I live in California.

- I live in Los Angeles. Thus? \_\_\_\_\_
- Suzie lives in California. Thus? \_\_\_\_\_

If I am in the 10<sup>th</sup> grade, I am in high school.

- Mr. Man is in the 10<sup>th</sup> grade. Thus? \_\_\_\_\_
- Miss Lady is in high school. Thus? \_\_\_\_\_