

2.1

Proofs

Definitions

Postulates

Properties

Theorems

2.2 Logic

Conditional Statements

If _____ then _____.

If p then q .

If today is Thursday then tomorrow is Friday.
 Hypothesis Conclusion

If the sidewalk is wet then it rained.

If today is Monday then we will have hamburgers.

If an \angle is 30° then it is acute.

Converse

If an \angle is acute then it is 30°

Reverse hypothesis and conclusion

Counterexamples 40°

Definition Both conditional and
converse are true

If an \angle is 90° then it is a right \angle .

If an \angle is a right \angle then it is 90° .

Euler Diagram

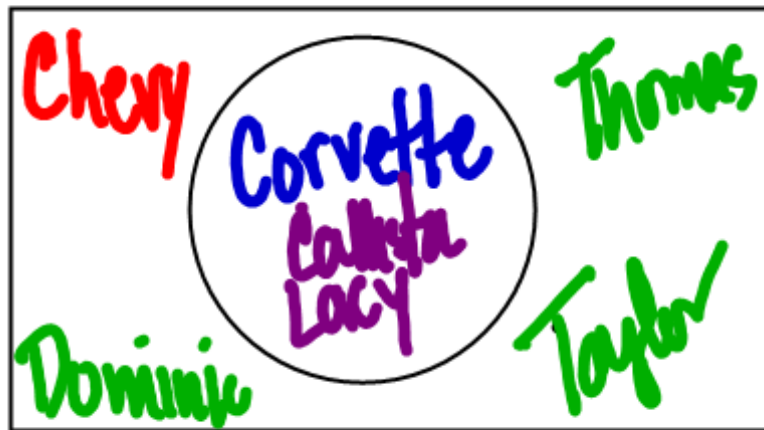
If a car is a **Corvette**, then

it is a **Chery**.

Conclusion

Hypothesis

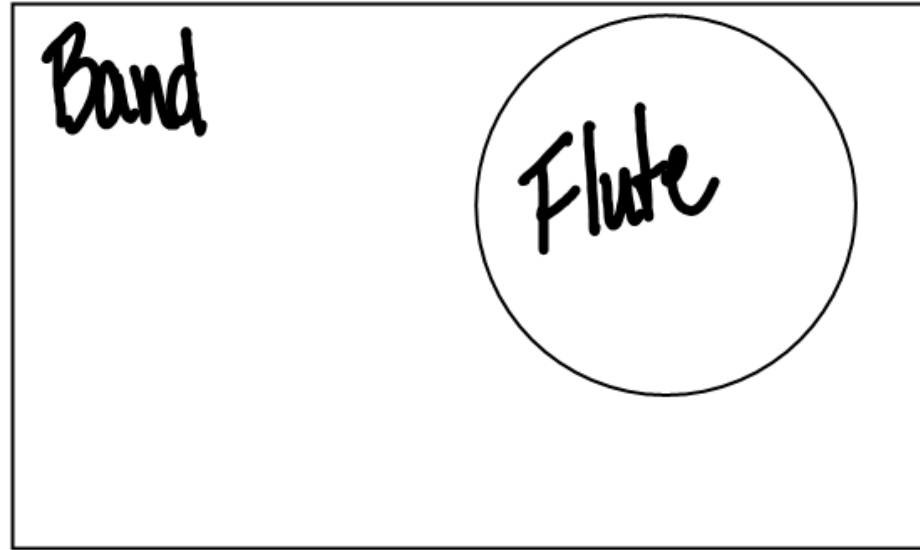
Kylie
Allie
Tennille



If you live in California then you
live in U.S.

A
T
K





If you play the flute then you play in band.

All people who live in KS live in U.S.

If you live in KS then live in U.S.
U hypothesis conclusion

Converse

If you live in U.S. then live in KS.

Logical Chain

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If Tim drives a car then Tim drives too fast.

If Tim drives too fast then the police catch Tim speeding.

If the police catch Tim speeding then Tim gets a ticket.

If Tim gets a ticket then Tim gets his license taken away.

If Tim gets his license taken away then Tim can't drive a car.

Conclusion

If Tim drives a car then Tim can't drive a car.

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9-12A

14, 18, 22, 30