Notes

Negation: Negation is using NOT before a statement. If the statement "X" is true, then "not X" is FALSE. If the statement "X" is false, then "not X" is TRUE.	Circle **true** statements **Statement / Not table below**

<table>
<tr><td colspan="2">Circle true statements</td></tr>
<tr><th>Statement</th><th>Not</th></tr>
<tr><td>"all even numbers are multiples of 2"</td><td>"no even numbers are multiples of 2"</td></tr>
<tr><td>"Baseball is not a sport"</td><td>Baseball is a sport</td></tr>
</table>

X = "Math is fun"
not X = MATH IS NOT FUN
not not X = MATH IS FUN

Inverse: Negating both the Hypothesis and the conclusion of a statement. Truth might change with inversion.	"**If** you grew up in Alaska, **Then**, you have seen snow." Inverse: "**If** you did not grow up in Alaska, **Then** you have not seen snow."
Converse: Switching the hypothesis and the conclusion of a statement. "If" and "Then" don't move. Truth might change with conversion.	"**If** I am a fish, **Then** I can swim" Converse: "**If** I am not a fish, **Then** I can not swim."
Contrapositive: The Converse and the Inverse of a	"**If** it is raining, **then** the grass is wet"

statement. Switching and Negating both parts of a statement. Truth Stays the same.	Converse: "**If** the grass is wet, **Then** it is raining." Contrapositive: "**If** the grass is not wet, **Then** it is not raining."