

Statements Involving If - Then

Statement: If you are a member of our school basketball team, then you must be a student at our school.

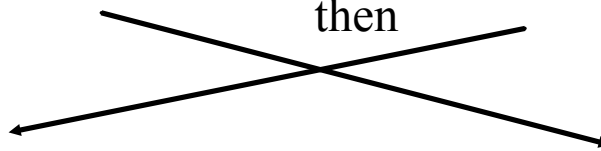
TRUE

Converse: Switch the statements around

Statement: If

then

Converse:



If you are a student at our school, then you must be a member of our school basketball team.

FALSE

Contrapositive: Interchange the two statements then form its negation.

If you are not a student at our school, then you must not be a member of our school basketball team.

TRUE

For each of the following write it as an If - Then statement. Then write its converse and contrapositive.

a) Multiples of 4 are always multiples of 8

False

If a number is a multiple of 4 Then
the number is always a multiple of 8.

4: 4, 8, 12, 16, 20, 24, ...

8: 8, 16, 24, 32, ...

Converse: If a number is ^{not} a multiple of 8
then the number is ^{not} always a multiple
of 4.

Contrapositive additions in Red.

b) If $\angle A$ is acute, then $\angle A = 30^\circ$ False

Converse: If $\angle x = 30^\circ$ then the ~~x~~ is acute

Contrap: If $\angle x \neq 30^\circ$ then the ~~x~~ is not acute.

c) A trapezoid has exactly one pair of parallel sides.

Assignment: Pg. 398 ~~113~~

2, 3 odds
4 odds
7, 9
10, 11 odds
13