6-2 Inverses and Contrapositives

Nov 29

Std. 2.0

hypothesis — conclusion

Conditional: If ***p***, then ***q***.

Converse: If ***q***, then ***p***.

Inverse: If not ***p***, then not ***q***.

Contrapositive: If not ***q***, then not ***p***.

both T or both F

ex. 1 A square is a quadrilateral.

T **Conditional:** If a figure is a square, then it is a quadrilateral.

F **Converse:** If a figure is a quadrilateral, then it is a square.

F **Inverse:** If a figure is not a square, then it is not a quadrilateral.

T **Contrapositive:** If a figure is not a quadrilateral, then it is not a square.

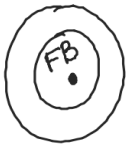
ex. 2 All football players wear uniforms.

If-then: If a person is a football player, then he wears a uniform.

Venn diagram:

What can you conclude?

a) Isaiah plays football.



Isaiah wears a uniform.

b) Emily wears a uniform.

None

c) Mrs. Bryant does not wear a uniform.

Mrs B

J?

Mrs B does not play football.

d) Josh is not a football player.

No conclusion