

Axiom

A statement that is assumed to be true without any proof.

Congruent

Two things are congruent if they are identical in size and shape.

Converse

The converse of a theorem is a statement that switches the hypothesis and conclusion.

Corollary

A statement that is true because it applies an already proven theorem.

Equivalent

Two things are equivalent if they have the same value but different forms.

If and only if

The first statement is true if and only if the second statement is true, so both statements are true or both statements are false.

Implies

If the first statement is true then the second statement is also true.

Proof

A logical argument which uses known truths to establish the truth of a statement.

Proof by contradiction

A proof that establishes the truth of a statement by showing that the statement being false would imply a contradiction.

Theorem

A mathematical statement which we can prove to be true by logical argument of accepted truths.