Name _____
Date _____ Period _____

Reaching conclusions about a statement given a true premise is known as

Deductive Reasoning

Conditional Statement:

If a triangle is equilateral, then the triangle is acute.

TRUE Statement

we can use Deductive Reasoning to conclude...

ΔABC is equilateral

Conclude:

If two numbers are odd, then their sum is even.

TRUE Statement

5 and 7 are odd numbers

Conclude:

Reaching conclusions about a statement given a true premise is known as

Deductive Reasoning

This reasoning is known as the Law of Detachment

if $p \rightarrow q$ is a true conditional and p is true, then q is true.

Conditional Statement:

If $m\angle 1 + m\angle 2 = 180°$, then $\angle 1$ and $\angle 2$ are supplementary $\angle$s.

TRUE Statement

we can use the Law of Detachment to conclude...

$m\angle ABC + m\angle XYZ = 180°$

Conclude:

Reaching conclusions about a statement given a true premise is known as

Deductive Reasoning

This reasoning is known as the Law of Detachment

if $p \rightarrow q$ is a true conditional and p is true, then q is true.

Conditional Statement:

If B is the midpoint of $\overline{AC}$,
then $\overline{AB} \cong \overline{AC}$.

TRUE Statement

Midpoint Theorem

we can use the Law of Detachment to conclude...

Y is the midpoint of $\overline{XZ}$

Conclude:

Reaching conclusions about a statement given a true premise is known as

Deductive Reasoning

Law of Syllogism

if $p \rightarrow q$ and $q \rightarrow r$ are true conditionals, then $p \rightarrow r$ is also true.

Conditional Statement:

If $\angle 1$ and $\angle 2$ form linear pair,
then $m\angle 1 + m\angle 2 = 180°$.

Conditional Statement:

If $m\angle 1 + m\angle 2 = 180°$,
then $\angle 1$ and $\angle 2$ are supp.

Law of Syllogism

Reaching conclusions about a statement given a true premise is known as

Deductive Reasoning

Law of Syllogism

if $p \rightarrow q$ and $q \rightarrow r$ are true conditionals, then $p \rightarrow r$ is also true.

Conditional Statement:	Conditional Statement:	Law of Syllogism
If B is the midpoint of $\overline{AC}$, then $AB = AC$.	If $AB = AC$, then $\overline{AB} \cong \overline{AC}$.	

Reaching conclusions about a statement given a true premise is known as

Deductive Reasoning

Law of Syllogism

if $p \rightarrow q$ and $q \rightarrow r$ are true conditionals, then $p \rightarrow r$ is also true.

Conditional Statement:	Conditional Statement:	Law of Syllogism
If $\angle 1$ and $\angle 2$ vertical angles, then $\angle 1 \cong \angle 2$.	If $\angle 1 \cong \angle 2$, then $m\angle 1 = m\angle 2$.	

Reaching conclusions about a statement given a true premise is known as

Deductive Reasoning

Law of Detachment

if $p \rightarrow q$ is a true conditional and p is true, then q is true.

Law of Syllogism

if $p \rightarrow q$ and $q \rightarrow r$ are true conditionals, then $p \rightarrow r$ is also true.