

- 1) The law of detachment states that if a conditional is true and its hypothesis is true, then its _____ must also be true.

Use the Law of Detachment to draw a conclusion if possible.

- 2) If two lines are parallel, then they do not intersect

Line a is parallel to line b .

- 3) If three points lie on the same line, then they are collinear.

Points A , B , and C lie on line l .

- 4) If the measures of two angles have a sum of 90 degrees, then the angles are complementary.

$$m\angle 1 + m\angle 2 = 90$$

- 5) If two figures are congruent, then their areas are equal.

The area of $ABCD$ equals the area of $WXYZ$

Use the Law of Syllogism to draw a conclusion if possible.

6) If a quadrilateral is a square, then it has four right angles.

If a quadrilateral has four right angles, then it is a rectangle.

7) If you understand the law of syllogism, you will do well on the test

If you do well on the test, you will get a passing grade.

8) If a number ends in 0, then it is divisible by 10.

If a number is divisible by 10, then it is divisible by 5.

9) If a number ends in 0, then it is divisible by 10.

If a number ends in 5, then it is divisible by 5.

Answer Key

- 1) Conclusion
- 2) Line a and b do not intersect
- 3) Points A , B , and C are collinear
- 4) $\angle 1$ & $\angle 2$ are complementary
- 5) Not possible
- 6) If a quadrilateral is a square, then it's a rectangle.
- 7) If you understand the law of syllogism, you will get a passing grade.]
- 8) If a number ends in 0, then it is divisible by 5.
- 9) Not possible.