Directions: Write the converse, inverse, and contrapositive. Then find the truth value for each statement. If appropriate, then write the biconditional statement.

1) If an angle is $90^\circ$, then it is a right angle.

T  F  Converse:

T  F  Inverse:

T  F  Contrapositive:

T  F  Biconditional:

2) If two angles are right angles, then the angles are congruent.

T  F  Converse:

T  F  Inverse:

T  F  Contrapositive:

T  F  Biconditional:

3) If two lines are perpendicular, then they form right angles.

T  F  Converse:

T  F  Inverse:

T  F  Contrapositive:

T  F  Biconditional:

4) If a nonzero number has exactly two factors, then the number is prime.

T  F  Converse:

T  F  Inverse:

T  F  Contrapositive:

T  F  Biconditional:
5) If \( x = 3 \), then \( x^2 = 9 \).

T F Converse:

T F Inverse:

T F Contrapositive:

T F Biconditional:

6) If a figure is a rectangle, then it has 4 sides.

T F Converse:

T F Inverse:

T F Contrapositive:

T F Biconditional:

**Directions:** Write the definition as a biconditional.

7) An isosceles triangle has at least two congruent sides.

8) Adjacent angles are two angles that share a side.

9) A cube is a three-dimensional solid with six square faces.