

SKILL

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Skills Readiness**Conditional Statements****Conditional Statements**

Hypothesis—the <i>if</i> part of a conditional statement	Conclusion—the <i>then</i> part of a conditional statement	Converse—a statement formed by interchanging the hypothesis and the conclusion
Example: Conditional statement: If a polygon is a pentagon, then it has 5 sides. (True)		
Hypothesis: A polygon is a pentagon.	Conclusion: It has 5 sides.	Converse: If a polygon has 5 sides, then it is a pentagon. (True)

Practice on Your Own

Identify the hypothesis and conclusion of each conditional.

1. If a triangle is a right triangle, then the sum of its acute angles is 90 degrees.

Hypothesis: _____ Conclusion: _____

2. If two lines are parallel to a third line, then they are parallel to each other.

Hypothesis: _____ Conclusion: _____

Tell whether the given statement is true or false. Write the converse.

Tell whether the converse is true or false.

- _____ 3. If a polygon is a triangle, then the sum of the measures of its angles is 180 degrees.

Converse: _____

- _____ 4. If two angles are right angles, then they are congruent.

Converse: _____

Check

Identify the hypothesis and conclusion of each conditional.

5. If two planes intersect, then they intersect in a line.

Hypothesis: _____ Conclusion: _____

Tell whether the given statement is true or false. Write the converse.

Tell whether the converse is true or false.

- _____ 6. If two angles are vertical, then they are congruent.

Converse: _____

- _____ 7. If the diagonals of a parallelogram are perpendicular, then the parallelogram is a rhombus.

Converse: _____