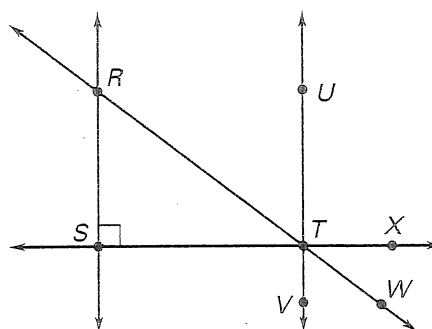


Practice C

For use with pages 79–85

Use the diagram to determine whether the statement is true or false.

- Points R , S , and T are collinear.
- $\angle UTR$ and $\angle UTW$ are supplementary.
- Points R , S , and T lie in the same plane.
- \overleftrightarrow{TS} is perpendicular to \overleftrightarrow{RS} .
- $\angle VTS$ and $\angle UTX$ are vertical angles.
- $\angle STR$ and $\angle RTU$ are complementary.
- Line \overleftrightarrow{RW} bisects $\angle UTS$.



Rewrite the biconditional statement as a conditional statement and its converse.

- An angle is acute if and only if it measures less than 90° .
- Three points are collinear if and only if they lie on the same line.
- I eat pizza if and only if it is Friday night.
- The game is cancelled if and only if it rains.
- A number is divisible by 6 if and only if it is divisible by 2 and 3.

Write the converse of each true statement. If the converse is also true, combine the statements to write a true biconditional statement. If the converse is false, give a counterexample.

- If you live in Detroit, then you live in Michigan.
- If an angle measures 30° , then it is acute.
- If two angles are supplementary, then their sum is 180° .
- If two angles are congruent, then they have the same measure.
- If two angles are vertical angles, then they are not adjacent.

In Exercises 18–20, use the information in the table to write a definition for each type of saxophone.

| Instrument | Frequency (cycles per second) | |
|---------------------------|-------------------------------|-------------|
| | Lower limit | Upper limit |
| E-flat baritone saxophone | 69 | 416 |
| B-flat tenor saxophone | 104 | 622 |
| E-flat alto saxophone | 138 | 831 |

- E-flat baritone saxophone
- B-flat tenor saxophone
- E-flat alto saxophone
- If the frequency of a saxophone was 100 Hz, what could you conclude?
- If the frequency of a saxophone was 150 Hz, what could you conclude?