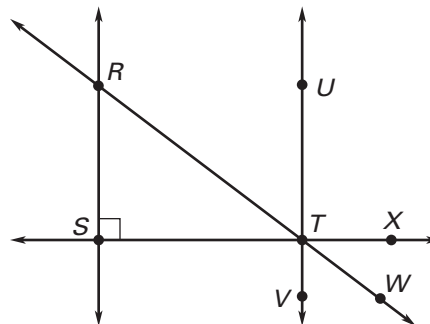


Practice C

For use with pages 79–85

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



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

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

8. An angle is acute if and only if it measures less than 90° .
9. Three points are collinear if and only if they lie on the same line.
10. I eat pizza if and only if it is Friday night.
11. The game is cancelled if and only if it rains.
12. 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.

13. If you live in Detroit, then you live in Michigan.
14. If an angle measures 30° , then it is acute.
15. If two angles are supplementary, then their sum is 180° .
16. If two angles are congruent, then they have the same measure.
17. 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

18. E-flat baritone saxophone
19. B-flat tenor saxophone
20. E-flat alto saxophone
21. If the frequency of a saxophone was 100 Hz, what could you conclude?
22. If the frequency of a saxophone was 150 Hz, what could you conclude?