

LESSON
2.2**Practice***For use with pages 79–85***Rewrite the conditional statement in if-then form.**

1. It is time for dinner if it is 6 P.M.
2. There are 12 eggs if the carton is full.
3. An obtuse angle is an angle that measures more than 90° and less than 180° .
4. The car runs when there is gas in the tank.

Write the converse, inverse, and contrapositive of each statement.

5. If you like hockey, then you go to the hockey game.
6. If x is odd, then $3x$ is odd.

Decide whether the statement is *true* or *false*. If false, provide a counterexample.

7. The equation $4x - 3 = 12 + 2x$ has exactly one solution.
8. If $x^2 = 36$, then x must equal 18 or -18 .
9. If $m\angle A = 122^\circ$, then the measure of the supplement of $\angle A$ is 58° .
10. Two lines intersect in at most one point.

LESSON
2.2**Practice** *continued*
For use with pages 79–85

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

11. If an angle measures 30° , then it is acute.
12. If two angles are supplementary, then their sum is 180° .
13. If two circles have the same diameter, then they have the same circumference.
14. If an animal is a panther, then it lives in the forest.

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

15. Two lines are perpendicular if and only if they intersect to form right angles.
16. A point is a midpoint of a segment if and only if it divides the segment into two congruent segments.

Decide whether the statement is a valid definition.

17. If a number is divisible by 2 and 3, then it is divisible by 6.
18. If two angles have the same measure, then they are congruent.
19. If two angles are not adjacent, then they are vertical angles.

LESSON
2.2

Practice *continued*
For use with pages 79–85

In Exercises 20–22, use the information in the table to write a definition for each type of saxophone.

Instrument	Frequency (cycles per second)	
	Lower limit (Hz)	Upper limit (Hz)
E-flat baritone saxophone	69	415
B-flat tenor saxophone	103	622
E-flat alto saxophone	138	830

20. E-flat baritone saxophone

21. B-flat tenor saxophone

22. E-flat alto saxophone

In Exercises 23 and 24, use the information in the table above and the answers to Exercise 20–22.

23. If the frequency of a saxophone was 95 Hz, what could you conclude?

24. If the frequency of a saxophone was 210 Hz, what could you conclude?