NAME _____ DATE _____

Practice A

For use with pages 71–78

Identify the hypothesis and the conclusion.

1. If the weather is warm, then we should go swimming.

2. If you want good service, then take your car to Joe's Service Center.

3. If you like purple, you'll love this sweater.

4. $2x - 12 = 40$ only if $x = 26$.

5. If the groundhog sees its shadow, then there will be six more weeks of winter.

Rewrite the conditional statement in if-then form.

6. Today is Monday if yesterday was Sunday.

7. An object measures 12 inches if it is one foot long.

8. A number is divisible by 4 if it is divisible by 8.

9. An acute angle is an angle that measures less than 90°.

10. All students taking geometry are in tenth grade.

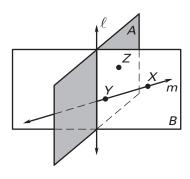## Decide whether the statement is *true* or *false*. If false, provide a counterexample.

11. The equation $2x - 7 = 5 + x$ has exactly one solution.

12. If $x^2 = 16$, then x must equal 8 or -8.

13. February 14 is Valentine's Day.

14. If you visited the Statue of Liberty, then you've been to New York.

15. A point may lie on at most two lines.

Write the converse and contrapositive of each statement.

16. If you like tennis, then you play on the tennis team.

17. If x is odd, then $2x$ is even.

18. If $m\angle P = 45°$, then $\angle P$ is acute.

Use the diagram to state the postulate(s) that verifies the truth of the statement.

19. The points X, Y, and Z lie in a plane (labeled B).

20. The points X and Y lie on a line (labeled m).

21. The planes A and B intersect in a line (labeled l).

22. The points X and Y lie in a plane B. Therefore, line m lies in plane B.