



Scan for Multimedia

IN-1 Additional Practice

In 1-4, determine whether the angle measures could be the measures of the interior angles of a triangle.

1. 43°, 37°, 100°

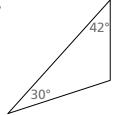
2. 45°, 45°, 50°

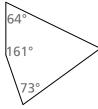
3. 35°, 60°, 85°

4. 111°, 62°, 7°

In 5–8, find the unknown angle measure in each triangle or quadrilateral.

5.

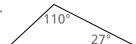




7.

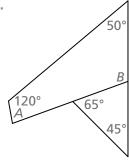


8.

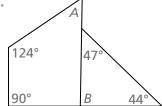


In 9 and 10, find the measures of angles A and B.

9.

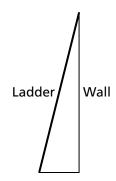


10.

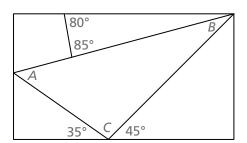


11. Model with Math Selena's backyard is shaped like a triangle. The angles next to the house are 63° and 47°. Write and solve an equation to find the measure of the third angle.

12. Reasoning A ladder is propped up against the outside wall of a house where the ground is level. If the angle the ladder forms with the wall is 14°, what angle does the ladder form with the ground? Explain.



- 13. A tabletop is made in the shape of a quadrilateral. Two of the angles are right angles, and one of the other angles measures 78°. What is the measure of the fourth angle of the tabletop?
- **14.** Evie is designing a triangular ramp. Her diagram of the ramp shows three angles with measures of 82°, 46°, and 51°. Jordan tells Evie that she cannot build a triangular ramp with those angles. Do you agree or disagree with Jordan? Explain.
- 15. Higher Order Thinking Hector is making a rectangular wooden puzzle for his grandchildren. He needs to cut the triangular piece that is to be located in the center of the puzzle. What are the measures of angles A, B, and C?



Assessment Practice

- 16. Choose Yes or No to tell which of the sets of angles could be the interior angles of a triangle.
 - a. 24°, 37°, 118° Yes O No
- - **b.** 18°, 115°, 47°
- Yes No
 - c. 33°, 99°, 48°
- Yes No
- **d.** 75°, 75°, 35°
- Yes No

- **17.** Three of the interior angles in a quadrilateral measure 66°, 105°, and 82°. Which of the following is the measure of the fourth interior angle of the quadrilateral?
 - ♠ 95°
 - $\bigcirc 97^{\circ}$
 - © 100°
 - D 107°