## IN-1 Additional Practice

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

1. $43^{\circ}, 37^{\circ}, 100^{\circ}$
2. $45^{\circ}, 45^{\circ}, 50^{\circ}$
3. $35^{\circ}, 60^{\circ}, 85^{\circ}$
4. $111^{\circ}, 62^{\circ}, 7^{\circ}$

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

6.

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 $63^{\circ}$ and $47^{\circ}$. 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 $14^{\circ}$, 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 $78^{\circ}$. 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 $82^{\circ}, 46^{\circ}$, and $51^{\circ}$. 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. $24^{\circ}, 37^{\circ}, 118^{\circ}$YesNo
b. $18^{\circ}, 115^{\circ}, 47^{\circ}$Yes $\bigcirc$ No
C. $33^{\circ}, 99^{\circ}, 48^{\circ}$YesNo
d. $75^{\circ}, 75^{\circ}, 35^{\circ}$
$\bigcirc$ Yes $\bigcirc$ No
17. Three of the interior angles in a quadrilateral measure $66^{\circ}, 105^{\circ}$, and $82^{\circ}$. Which of the following is the measure of the fourth interior angle of the quadrilateral?
(A) $95^{\circ}$
(B) $97^{\circ}$
(C) $100^{\circ}$
(D) $107^{\circ}$
