Name: _____

Practice & Problem Solving ✏️ ⏻

In 7–10, find the missing angle measure in each figure.

7.

62°
78°
1

$m\angle 1 + \boxed{} + \boxed{} = 180$

$m\angle 1 + \boxed{} = 180$

$m\angle 1 = \boxed{}$

8.

130°
116°
80°
3

$m\angle 3 + \boxed{} + \boxed{} + \boxed{} = 360$

$m\angle 3 + \boxed{} = 360$

$m\angle 3 = \boxed{}$

9.

40°   85°
153°
2

10.
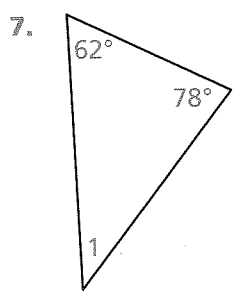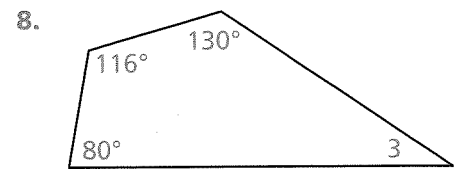
52°
4   33°
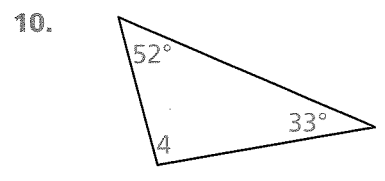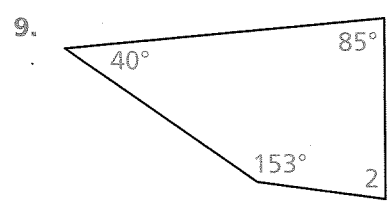
In 11 and 12, find the measures of angles A and B.

11.

38°
54°
42°
75°   A   B

12.

A   B 86°
70°
63°   79°
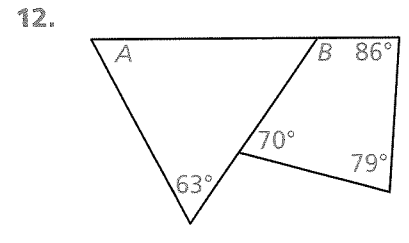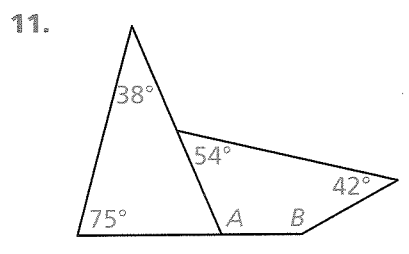
13. A ramp is being built and attached to a building to help with deliveries. The angle that the bottom of the ramp makes with the ground is 37.2°. Find the measure of the other acute angle.

37.2°
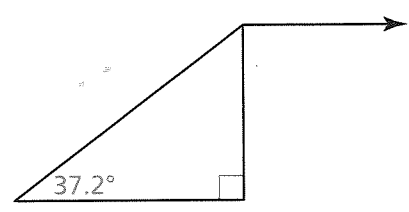
**In 14–17, use the image of the stained glass window.**

14. What is the measure of the third angle in the yellow triangle?

15. The black border of the window is a rectangle. Explain how this information can help you to find the missing angle measures in the blue triangle.

16. Critique Reasoning Emma says that because none of the angle measures in the orange triangle is given, it is impossible to find the angle measures. Is Emma's reasoning correct? Explain.

17. What are the measures of the angles in the green quadrilateral in the middle of the window?

18. Higher Order Thinking The measure of one of the interior angles of a parallelogram is 57°. What are the measures of the other three angles? Explain.
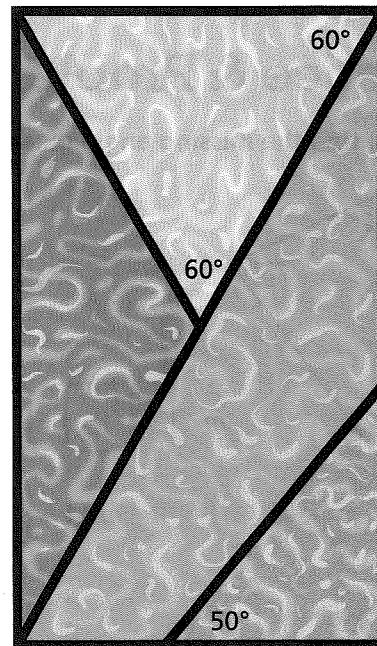
✓ Assessment Practice

19. Choose Yes or No to tell which of the sets of angle measures could be the interior angles of a triangle.

    a. 87°, 29°, 64°   ○ Yes   ○ No

    b. 57°, 53°, 90°   ○ Yes   ○ No

    c. 76°, 22°, 62°   ○ Yes   ○ No

    d. 124°, 28°, 28°   ○ Yes   ○ No

20. Three of the interior angle measures of a quadrilateral are 100°, 95°, and 73°. Which of the following angle measures would be the fourth interior angle measure of the quadrilateral?

    Ⓐ 88°   Ⓒ 112°

    Ⓑ 92°   Ⓓ 268°