

## Practice

## The Law of Sines

Solve each triangle. Round to the nearest tenth.

1.  $A = 38^\circ, B = 63^\circ, c = 15$

2.  $A = 33^\circ, B = 29^\circ, b = 41$

3.  $A = 150^\circ, C = 20^\circ, a = 200$

4.  $A = 30^\circ, B = 45^\circ, a = 10$

Find the area of each triangle. Round to the nearest tenth.

5.  $c = 4, A = 37^\circ, B = 69^\circ$

6.  $C = 85^\circ, a = 2, B = 19^\circ$

7.  $A = 50^\circ, b = 12, c = 14$

8.  $b = 14, C = 110^\circ, B = 25^\circ$

9.  $b = 15, c = 20, A = 115^\circ$

10.  $a = 68, c = 110, B = 42.5^\circ$

11. **Street Lighting** A lamppost tilts toward the sun at a  $2^\circ$  angle from the vertical and casts a 25-foot shadow. The angle from the tip of the shadow to the top of the lamppost is  $45^\circ$ . Find the length of the lamppost.

