

5-6

Practice

The Law of Sines

Solve each triangle. Round to the nearest tenth.

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

$C = 79^\circ, a = 9.4, b = 13.6$

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

$C = 118^\circ, a = 46.1, c = 74.7$

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

$B = 10^\circ, b = 69.5,$
 $c = 136.8$

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

$C = 105^\circ, b = 14.1, c = 19.3$

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

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

4.7 units^2

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

0.7 units^2

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

64.3 units^2

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

154.1 units^2

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

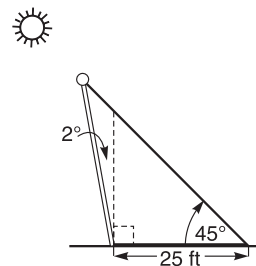
135.9 units^2

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

2526.7 units^2

11. **Street Lighting** A lamppost tilts toward the sun at a 2° 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° . Find the length of the lamppost.

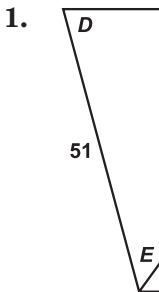
about 25.9 ft



5-6

Triangle

A surveyor t...
shaped piece...
are missing...
Round lengt...
nearest min...

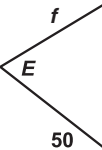


$a \approx 66.$

$A \approx 10.$

$E \approx 50.$

2.



$b \approx 11.$

$A \approx 32.$

$E \approx 82.$