

Sine Law Drills

Solve the triangle ABC given the following. Round the angles to the nearest degree and the lengths to 2 decimal places.

1. $A = 41^\circ$, $C = 95^\circ$, $a = 19.91$ cm.
2. $B = 21^\circ$, $C = 93^\circ$, $c = 16$ cm.
3. $A = 44^\circ$, $C = 70^\circ$, $a = 8.12$ cm.
4. $C = 30^\circ$, $a = 19.65$ cm, $c = 11.13$ cm.
5. $A = 36^\circ$, $C = 114^\circ$, $a = 12.3$ cm.
6. $B = 4^\circ$, $b = 12.78$ cm, $c = 38.08$ cm.
7. $A = 95^\circ$, $a = 54.95$ cm, $b = 30.04$ cm.
8. $A = 14^\circ$, $C = 93^\circ$, $c = 18.78$ cm.
9. $A = 160^\circ$, $B = 4^\circ$, $a = 13.8$ cm.
10. $B = 116^\circ$, $C = 22^\circ$, $c = 14.41$ cm.
11. $A = 64^\circ$, $a = 76.79$ cm, $c = 29.22$ cm.
12. $C = 11^\circ$, $b = 36.41$ cm, $c = 17.08$ cm.
13. $A = 73^\circ$, $B = 33^\circ$, $a = 28.8$ cm.
14. $C = 83^\circ$, $b = 6$ cm, $c = 12.68$ cm.
15. $A = 3^\circ$, $B = 94^\circ$, $b = 12.63$ cm.

Answers

1. $B=44^\circ$, $b=21.08$ cm, $c=30.23$ cm. 2. $A=66^\circ$, $a=14.64$ cm, $b=5.74$ cm. 3. $B=66^\circ$, $b=10.67$ cm, $c=10.98$ cm. 4. $A=62^\circ$, $B=88^\circ$, $b=5.56$ cm. 5. $B=30^\circ$, $b=10.46$ cm, $c=19.12$ cm. 6. $A=164^\circ$, $C=12^\circ$, $a=50.48$ cm. 7. $B=33^\circ$, $C=52^\circ$, $c=43.47$ cm. 8. $B=73^\circ$, $a=4.55$ cm, $b=17.98$ cm. 9. $C=16^\circ$, $b=2.81$ cm, $c=11.12$ cm. 10. $A=42^\circ$, $a=25.74$ cm, $b=34.57$ cm. 11. $B=96^\circ$, $C=20^\circ$, $b=84.97$ cm. 12. $A=145^\circ$, $B=24^\circ$, $a=51.34$ cm. 13. $C=74^\circ$, $b=16.4$ cm, $c=28.95$ cm. 14. $A=69^\circ$, $B=28^\circ$, $a=11.93$ cm. 15. $C=83^\circ$, $a=0.66$ cm, $c=12.57$ cm.