

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. $A = 134$ deg, $B = 26$ deg, $a = 60.17$ cm.
2. $B = 5$ deg, $C = 66$ deg, $c = 37.5$ cm.
3. $A = 61$ deg, $B = 12$ deg, $b = 1.3$ cm.
4. $C = 37$ deg, $a = 12.6$ deg, $c = 9.62$ cm.
5. $B = 20$ deg, $C = 14$ deg, $b = 34.1$ cm.
6. $B = 114$ deg, $b = 32.93$ cm, $c = 11.14$ cm.
7. $A = 9$ deg, $C = 12$ deg, $a = 21.04$ cm.
8. $B = 26$ deg, $a = 60.33$ cm, $b = 28.33$ cm.
9. $A = 62$ deg, $C = 34$ deg, $a = 54.47$ cm.
10. $B = 4$ deg, $C = 94$ deg, $c = 29.31$ cm.
11. $A = 38$ deg, $B = 63$ deg, $b = 40.42$ cm.
12. $B = 3$ deg, $a = 12.17$ cm, $b = 0.95$ cm.
13. $A = 91$ deg, $a = 44.5$ cm, $c = 43.18$ cm.
14. $B = 45$ deg, $C = 110$ deg, $c = 22.96$ cm.
15. $A = 170$ deg, $C = 9$ deg, $a = 10.28$ cm.

Answers

1. $C=20$ deg, $b=36.67$ cm, $c=28.61$ cm. 2. $A=109$ deg, $a=38.81$ cm, $b=3.58$ cm. 3. $C=107$ deg, $a=5.48$ cm, $c=5.99$ cm. 4. $A=52$ deg, $B=91$ deg, $b=5.79$ cm. 5. $A=146$ deg, $a=55.75$ cm, $c=24.12$ cm. 6. $A=48$ deg, $C=18$ deg, $a=26.79$ cm. 7. $B=159$ deg, $b=48.21$ cm, $c=27.97$ cm. 8. $A=69$ deg, $C=85$ deg, $c=64.38$ cm. 9. $B=84$ deg, $b=61.36$ cm, $c=34.5$ cm. 10. $A=82$ deg, $a=29.1$ cm, $b=2.05$ cm. 11. $C=79$ deg, $a=27.93$ cm, $c=44.53$ cm. 12. $A=42$ deg, $C=135$ deg, $c=12.84$ cm. 13. $B=13$ deg, $C=76$ deg, $b=10.01$ cm. 14. $A=25$ deg, $a=10.33$ cm, $b=17.28$ cm. 15. $B=1$ deg, $b=1.03$ cm, $c=9.26$ cm.