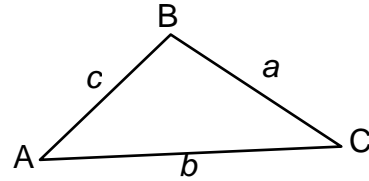


Trigonometry

Solving Triangles: The Law of Sines and Cosines – Mixed Homework

Solve for the missing dimensions of each of the following triangles, if possible, to the nearest tenth. If there are two possible sets of dimensions, give both. The sides and angles of each triangle follow the pattern shown below.



- 1) $b = 40, c = 45, A = 51^\circ$
- 2) $b = 15.2, A = 12.5^\circ, C = 57.5^\circ$
- 3) $a = 15, b = 18, c = 20$
- 4) $B = 100^\circ, b = 10, c = 15$
- 5) $a = 20, b = 12, c = 28$
- 6) $a = 125, A = 25^\circ, b = 150$
- 7) $a = 10, b = 8, A = 100^\circ$
- 8) $a = 17, b = 28, A = 72^\circ$
- 9) $a = 45, B = 39^\circ, C = 40^\circ$
- 10) $a = 12.2, B = 80^\circ, c = 18$