

1. For a triangle which has edges of 5.2 cm, 3.9 cm and 6.1 cm, calculate the size of the largest angle.
2. Triangle ABC has $AB = 8.3$ cm, $BC = 7.8$ cm and $\angle ABC = 56^\circ$. Find the length of AC.
3. In triangle LMN, $L = 42^\circ$, $m = 4.3$ cm and $l = 5.4$ cm. Find M.
4. Find the area of triangle ABC which has $AB = 12$ cm, $BC = 14$ cm and $\angle ABC = 36^\circ$.
5. In the triangle PQR, $PQ = 3.9$ cm, $QR = 5.1$ cm and $\angle PQR = 131^\circ$. Calculate the length of PR.
6. For each of these, give the **three** smallest possible **positive** angles having these **sine** values
 - (i) 0.150
 - (ii) 0.964
 - (iii) -0.708
7. For each of these, give the **three** smallest possible **positive** angles having these **cosine** values
 - (i) 0.257
 - (ii) 0.693
 - (iii) -0.861
8. Given the values of the following
 - (i) $\sin 130^\circ$
 - (ii) $\sin 179^\circ$
 - (iii) $\sin^{-1} 265^\circ$
 - (iv) $\cos 150^\circ$
 - (v) $\cos 108^\circ$
 - (vi) $\cos^{-1} 283^\circ$
9. Find the area of a triangle whose edges are 10, 12 and 18 cm.
10. Triangle XYZ has $XY = 18$ cm, $YZ = 12.1$ cm and $\angle YXZ = 33^\circ$. Calculate the two possibilities for the size of $\angle YZX$.
11. In the triangle LMN, calculate the size of M given that $l = 3.7$ cm, $m = 4.6$ cm and $n = 2.3$ cm.
12. Two people start walking from the same place. One walks due South at 5 kilometres an hour, and the other walks South-west at 4 kilometres an hour. What is the distance between them after 5 hours have elapsed?
13. A regular pentagon has a circumscribed circle of radius 4.9 cm. Find the area of the pentagon.
14. A regular decagon has an inscribed circle of radius 7.3 cm. Calculate the perimeter of the decagon