

Trigonometric Functions

Exercise 12.5 for Class XI

Question # 1 Solve the following triangle ABC in which:
 $b=95$, $c=34$, $\alpha=52^\circ$.

Question # 2 Solve the following triangle ABC in which:
 $b=12.5$, $c=23$, $\alpha=38^\circ 20'$

Question # 3 Solve the following triangle ABC in which:
 $a=\sqrt{3}-1=0.732$, $b=\sqrt{3}+1=2.732$, $\gamma=60^\circ$

Question # 4 Solve the following triangle ABC in which:
 $a=3$, $b=6$, $\gamma=36^\circ 20'$

Question # 5 Solve the following triangle ABC in which:
 $a=7$, $b=3$, $\gamma=38^\circ 13'$

Question # 6 Solve the following triangle, using first law of tangent and then law of sines:
 $a=36.21$, $b=42.09$, $\gamma=44^\circ 29'$

Question # 7 Solve the following triangle, using first law of tangent and then law of sines:
 $a=93$, $c=101$, $\alpha=80^\circ$

Question # 8 Solve the following triangle, using first law of tangent and then law of sines:
 $b=14.8$, $c=16.1$, $\alpha=42^\circ 45'$

Question # 9 Solve the following triangle, using first law of tangent and then law of sines:
 $a=319$, $b=168$, $\alpha=110^\circ 22'$

Question # 10 Solve the following triangle, using first law of tangent and then law of sines:
 $b=61$, $c=32$, $\alpha=59^\circ 30'$

Question # 11 Measure of two sides of the triangle are in the ratio 3:2 and they include a angle of measure 57° . Find the remaining two angles.

Question # 12 Two forces of 40N and 30N are represented by \overline{AB} and \overline{BC} which are inclined at an angle of $147^\circ 25'$. Find \overline{AC} , the resultant of \overline{AB} and \overline{BC} .