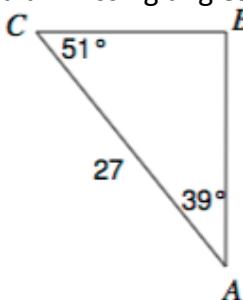


Solve the following non-right triangles using the Law of Sines (find all missing angles and sides)

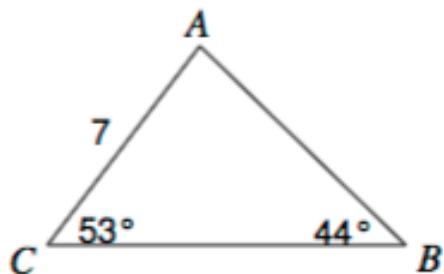
1.



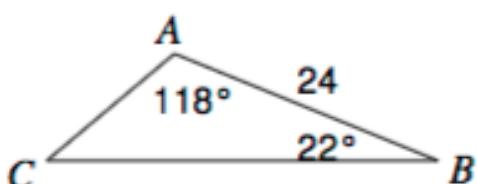
2.



3.

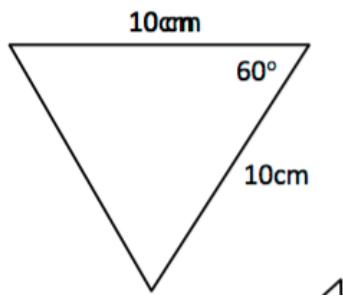


4.

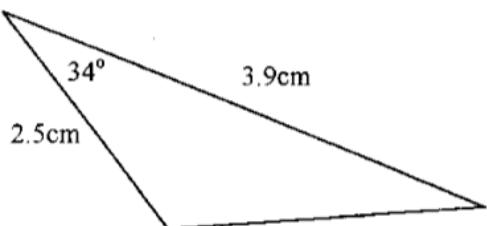


Calculate the area of the following non-right triangles

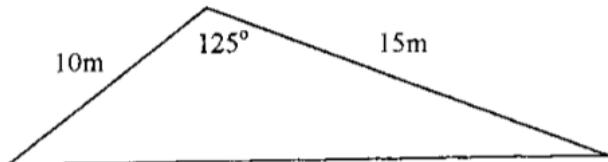
5.



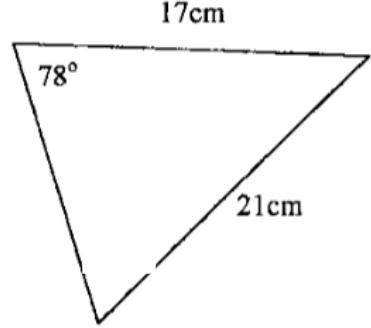
6.



7.



8.



State in which quadrants the following functions are positive.

9. Sine

10. Cosine

11. Tangent

Evaluate the following without a calculator.

12. $\cos \frac{4\rho}{3} =$

13. $\sin \frac{11\rho}{6} =$

14. $\tan \frac{3\rho}{2} =$

15. $\sin \frac{\rho}{3} =$

16. $\tan \frac{5\rho}{6} =$

17. $\cos \frac{\rho}{2} =$

18. $\sin \rho =$

19. $\tan \frac{2\rho}{3} =$

Evaluate the following for the missing angle q . Remember there are 2 answers.

20. $\cos q = \frac{\sqrt{2}}{2}$

21. $\sin q = -\frac{1}{2}$

22. $\tan q = -\sqrt{3}$

23. $\sin q = \frac{\sqrt{3}}{2}$

24. $\tan q = \frac{\sqrt{3}}{3}$

25. $\cos q = -\frac{\sqrt{3}}{2}$

26. $\sin q = -\frac{\sqrt{2}}{2}$

27. $\tan q = 1$