

RS Aggarwal Class 10 Solutions Trigonometric Ratios

<https://www.aplustopper.com/lesson/rs-aggarwal-class-10-solutions-trigonometric-ratios/>

<http://bit.ly/2ImUAcM>

<https://trello.com/c/Dnr91T3D>

<https://drive.google.com/drive/u/0/folders/1DPjRWqE3iFnX1JKYYZoF9vQxlur5OzA7>

<http://bit.ly/2lxfRXT>

https://docs.google.com/presentation/d/e/2PACX-1vR5oz4_vHr5EpHU_Yzm78cixKZZDIC6MyNkPcVeacUvuFM7XQcFSGTlz0iyqFruOoS9t9zqV1bYIGAr/pub?start=false&loop=false&delayms=3000

<http://bit.ly/2ljUWRb>

https://docs.google.com/document/d/e/2PACX-1vTvmPtnREhJbcUFemC_euRvrLo8m7bm4aRVw6XDmlkAlFa_tKMRb12FPr6wfYVla78jUj1F4TLe5brM/pub

<http://bit.ly/2yACOTy>

<https://sites.google.com/site/aplustopperguide/rs-aggarwal-class-10-solutions-trigonometric-ratios>

<http://bit.ly/2tntSMo>

http://aplustoppernotes.blogspot.com/2018/06/rs-aggarwal-class-10-solutions_23.html

<http://bit.ly/2yD1mLK>

<https://aplustoppernotes.wordpress.com/2018/06/23/rs-aggarwal-class-10-solutions-trigonometric-ratios/>

<http://bit.ly/2MfZF8R>

<https://wp.me/p9YiSz-3m>

<https://ccna-security.tumblr.com/post/175167337913/rs-aggarwal-class-10-solutions-trigonometric-ratios>

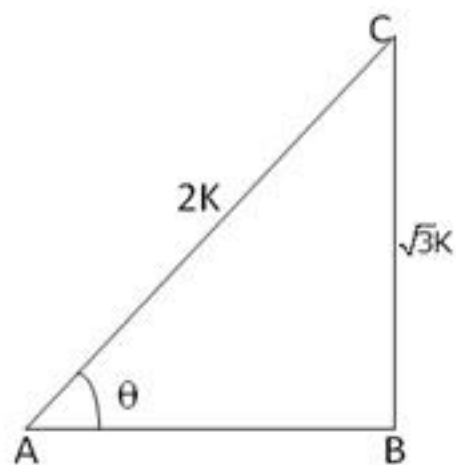
<http://bit.ly/2KiFIGw>

APlusTopper.com Provides RS Aggarwal Class 10 Solutions with Free PDF download option. All questions are solved by expert Mathematic Teachers as per NCERT (CBSE) guidelines.

Question 1:

Given: $\sin \theta = \frac{\sqrt{3}}{2}$

Let us draw a $\triangle ABC$ in which $\angle B = 90^\circ$ and $\angle BAC = \theta$



Then, $\sin \theta = \frac{BC}{AC} = \frac{\sqrt{3}}{2}$

Let $BC = \sqrt{3}k$
and $AC = 2k$,
where k is positive

By pythagoras theorem, we have

$$AC^2 = AB^2 + BC^2$$

$$\Rightarrow AB^2 = AC^2 - BC^2$$

$$AB^2 = \left[(2k)^2 - (\sqrt{3}k)^2 \right] \\ = (4k^2 - 3k^2)$$

$$\Rightarrow AB = \sqrt{k^2} = k$$

$$\therefore \sin \theta = \frac{BC}{AC} = \frac{\sqrt{3}k}{2k} = \frac{\sqrt{3}}{2},$$

$$\cos \theta = \frac{AB}{AC} = \frac{k}{2k} = \frac{1}{2}$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta} = \left(\frac{\sqrt{3}}{2} \times \frac{2}{1} \right) = \sqrt{3};$$

$$\operatorname{cosec} \theta = \frac{1}{\sin \theta} = \frac{2}{\sqrt{3}},$$

$$\sec \theta = \frac{1}{\cos \theta} = \frac{2}{1} = 2 \quad \text{and}$$

$$\cot \theta = \frac{1}{\tan \theta} = \frac{1}{\sqrt{3}}$$