	BCM SCHOOL BASANT AVENUE DUGRI ROAD LUDHIANA ASSIGNMENT CLASS XIISC	
1	**Which of the following is the principal value branch of $\cos^{-1}x$?** **A)$[0,\pi]$ B)$(0,\pi)$ C)$\{0,\pi\}$ D)$(0,\pi]$**	1
2	Find the value of $\sin\left(2\tan^{-1}\frac{2}{3}\right)+\cos\left(\tan^{-1}\sqrt{3}\right)$ **A) $\frac{29}{26}$ B) $\frac{31}{26}$ C) $\frac{37}{29}$ D) $\frac{37}{26}$**	1
3	**Find the principal value of $\tan^{-1}\sqrt{3}-\sec^{-1}(-2)$**	2
4	**Write the value of $\tan^{-1}[2\sin(2\cos^{-1}(\sqrt{3}/2))]$**	2
5	**Find the value of $\sin(\cos^{-1}\frac{4}{5}+\tan^{-1}\frac{2}{3})$**	2
6	Prove that $\tan\left\{\frac{\pi}{4}+\frac{1}{2}\cos^{-1}\frac{a}{b}\right\}+\tan\left\{\frac{\pi}{4}-\frac{1}{2}\cos^{-1}\left(\frac{a}{b}\right)\right\}=\frac{2b}{a}$	3
7	**Solve the following equation for x. $\cos(\tan^{-1}x)=\sin(\cot^{-1}3/4)$** **OR** **Show that $\tan(\frac{1}{2}\sin^{-1}\frac{3}{4})=\frac{4-\sqrt{7}}{3}$**	4