

## mobius

## **Trigonometry - Calculating Angles from Ratios (to -1 Notation)**



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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	calculate the angle, $tan(lpha)=1.004$	calculate the angle,	$\cos(lpha)=0.799$
3 How would you calculate the angle, using -1 notation? $\alpha = \tan^{-1}(0.532)$ A $\alpha = \frac{1}{a\cos(0.799)}$ A $\alpha = \cos^{-1}(0.545)$ A $\alpha = \frac{1}{a\tan(0.532)}$ B $\alpha = \frac{1}{\tan^{-1}(0.532)}$ A $\alpha = \frac{1}{\cos^{-1}(0.545)}$ B $\alpha = \cos(0.545) - 1$ C $\alpha = \tan(0.532) - 1$ D $\alpha = \tan^{-1}(0.532)$ C $\alpha = \frac{1}{a\cos(0.545)}$ D $\alpha = \cos^{-1}(0.545)$ 5 How would you calculate the angle, $\cos(\alpha) = 0.743$ C $\cos(\alpha) = 0.407$	$lpha = rac{1}{atan(1.664)}$ $egin{array}{ccccc} B & & lpha = rac{1}{tan^{-1}(1.664)} \end{array}$	$\stackrel{ ext{A}}{lpha}=\cos(0.799)-1$	$\alpha = \frac{1}{\cos^{-1}(0.799)}$
How would you calculate the angle, using -1 notation? $\tan(\alpha)=0.532$ $\tan(\alpha)=0.532$ $\tan(\alpha)=0.545$ $\tan(\alpha)=0.532$ $\tan(\alpha)=0.532$ $\tan(\alpha)=0.545$ $\tan(\alpha)=0.532$ $\tan$	$\stackrel{\mathtt{C}}{lpha} = tan(1.664) - 1 \stackrel{\mathtt{D}}{lpha} = tan^{-1}(1.664)$	$\alpha = \frac{1}{acos(0.799)}$	$^{ extsf{D}}lpha=\cos^{-1}(0.799)$
How would you calculate the angle, using -1 notation? $\tan(\alpha)=0.532$ $\tan(\alpha)=0.532$ $\tan(\alpha)=0.545$ $\tan(\alpha)=0.532$ $\tan(\alpha)=0.532$ $\tan(\alpha)=0.545$ $\tan(\alpha)=0.532$ $\tan$			
	range calculate the angle, $ an(lpha)=0.532$	calculate the angle,	$\cos(lpha)=0.545$
$\alpha = \tan(0.532) - 1  \alpha = \tan^{-1}(0.532) \qquad \alpha = \frac{1}{\arccos(0.545)} \qquad \alpha = \cos^{-1}(0.545)$ $\frac{1}{\alpha} = \tan^{-1}(0.532) \qquad \alpha = \cos^{-1}(0.545) \qquad \alpha = \cos^{-1}(0.545)$ $\frac{1}{\alpha} = \cos^{-1}(0.545) \qquad \alpha = \cos^{-1}(0.545)$	$lpha = rac{1}{atan(0.532)}$ $egin{array}{cccc} B & & lpha = rac{1}{tan^{-1}(0.532)} \end{array}$	$lpha = rac{1}{\cos^{-1}(0.545)}$	$\stackrel{\scriptscriptstyleB}{lpha}=\cos(0.545)-1$
calculate the angle, $\cos(lpha)=0.743$ How would you calculate the angle, $\cos(lpha)=0.407$	$\overset{\mathtt{C}}{lpha} = tan(0.532) - 1  ^{\mathtt{D}} \! lpha = tan^{-1}(0.532)$	$\alpha = \frac{1}{acos(0.545)}$	$^{ extsf{D}}lpha=\cos^{-1}(0.545)$
calculate the angle, $\cos(lpha)=0.743$ How would you calculate the angle, $\cos(lpha)=0.407$			
	calculate the angle, $\cos(lpha)=0.743$	How would you calculate the angle,	$\cos(lpha)=0.407$
$^{A} \qquad \alpha = \frac{1}{acos(0.743)} \qquad ^{B} \alpha = cos^{-1}(0.743)  ^{A} \alpha = cos^{-1}(0.407)  ^{B} \qquad \alpha = \frac{1}{acos(0.407)}$	$\alpha = \frac{1}{acos(0.743)}$ $\alpha = cos^{-1}(0.743)$	$^{A}lpha=cos^{-1}(0.407)$	$\alpha = \frac{1}{acos(0.407)}$
$\alpha = \frac{1}{\cos^{-1}(0.743)}$ $\alpha = \cos(0.743) - 1$ $\alpha = \frac{1}{\cos^{-1}(0.407)}$ $\alpha = \cos(0.407) - 1$	$\alpha = \frac{1}{\cos^{-1}(0.743)}$ $\alpha = \cos(0.743) - 1$	$lpha=rac{1}{cos^{-1}(0.407)}$	$\stackrel{ extsf{D}}{lpha}=\cos(0.407)-1$
	7 How would you calculate the angle, using -1 notation? $\cos(lpha)=0.669$	How would you calculate the angle, using -1 notation?	$\cos(lpha)=$ 0.719
How would you calculate the angle, $\cos(lpha)=0.669$ How would you calculate the angle, $\cos(lpha)=0.719$	$lpha = \cos^{-1}(0.669)$ $lpha = \cos(0.669) - 1$	$\alpha = \frac{1}{acos(0.719)}$	$\alpha = \frac{1}{\cos^{-1}(0.719)}$
How would you calculate the angle, using -1 notation? $\cos(lpha)=0.669$ How would you calculate the angle, using -1 notation? $\cos(lpha)=0.719$	$lpha = rac{1}{cos^{-1}(0.669)}$ D $lpha = rac{1}{acos(0.669)}$	$^{ extsf{C}}lpha=\cos^{-1}(0.719)$	$lpha = \cos(0.719) - 1$
How would you calculate the angle, using -1 notation? $\cos(\alpha)=0.669$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$ $\cos(\alpha)=0.719$			