

Title

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1 9.7.2 Worked Example

Sectiontext

1.1 1. Find the values of $\sin 75^\circ$, $\cos 75^\circ$ and $\tan 75^\circ$

We now that $\sin A + B = \sin A \cos B + \cos A \sin B$

1.2 Solution

Put $A = 45^\circ$, $B = 30^\circ$ $\sin (45+30) = \sin 45 \cos 30 + \cos 45 \sin 30$

i.e., $\sin 75 = \frac{1}{2} \cdot \frac{\sqrt{3}}{2} + \frac{\sqrt{2}}{2} \cdot \frac{1}{2} = \frac{\sqrt{3} + \sqrt{2}}{4}$

$\sin 75 = \frac{\sqrt{3} + \sqrt{2}}{4}$

we know that $\cos A + B = \cos A \cos B - \sin A \sin B$. Put $A = 45^\circ$, $B = 30^\circ$

$\cos (45+30) = \cos 45 \cos 30 - \sin 45 \sin 30$

i.e $\cos 75 = \frac{\sqrt{2}}{2} \cdot \frac{\sqrt{3}}{2} - \frac{1}{2} \cdot \frac{1}{2} = \frac{\sqrt{6} - 1}{4}$

Thus, we have $\cos 75 = \frac{\sqrt{6} - 1}{4}$

$\tan (A+B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$ put $A = 45^\circ$, $B = 30^\circ$

Normal text

tiny testtext

But you can easily embed tiny text into other sizes.

1.3 Link

Link to ICAT:

<http://www.icat.ac.id/>