

5.3: Sum and Difference Identities for Cosine

5.4: Sum and Difference Identities for Sine and Tangent

Sum and Difference Identities

$$\cos(A+B) = \cos A \cos B - \sin A \sin B$$

$$\cos(A-B) = \cos A \cos B + \sin A \sin B$$

$$\sin(A+B) = \sin A \cos B + \cos A \sin B$$

$$\sin(A-B) = \sin A \cos B - \cos A \sin B$$

$$\tan(A+B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$$

$$\tan(A-B) = \frac{\tan A - \tan B}{1 + \tan A \tan B}$$

Ex. Find the exact value of $\cos(75^\circ)$.

(no pdf notes due to power outage)

