

Section 5-3 Continued

Use the composite argument properties to show that the given equation is an identity.

1. $\cos 10x \cos 6x + \sin 10x \sin 6x = \cos 4x$

a) Find the general solution for θ and then b) the particular solutions for $\theta \in [0, 360^\circ)$

2. $\sin \theta \cos 35^\circ + \cos \theta \sin 35^\circ = 0.5$

3. $\frac{\tan \theta + \tan 27^\circ}{1 - \tan \theta \tan 27^\circ} = 1$

The figures show angles A and B. Use the composite argument properties to find the exact value(no decimals).

4. $\sin(A + B)$

5. $\tan(A + B)$