1. $\sin 9x + \sin 5x + 2\sin^2 x = 1$
   $\sin 9x + \sin 5x + 2\sin^2 x = \sin^2 x + \cos^2 x$
   $\sin 9x + \sin 5x = \cos^2 x - \sin^2 x$
   $\sin 9x + \sin 5x = \cos^2 x \; 2\sin(\frac{9x+5x}{2})\cos(\frac{9x-5x}{2}) = cos2x$
   $2\sin(\frac{14x}{2})\cos(\frac{4x}{2}) = \cos 2x$
   $2\sin(\frac{14x}{2})\cos(2x) = \cos 2x$
   $2\sin(\frac{14x}{2}) = 1$
   $\sin(\frac{14x}{2}) = \frac{1}{2}$
   Ingat bahwa $\sin 45^o = \frac{1}{2}$ dan $\sin 135^o = \frac{1}{2}$
   $\frac{14x}{2} = 45^o$ maka $x = 90/14 = 6.428...$ dan $\frac{14x}{2} = 135^o$ maka $x = 270/14 = 19.285$
2. $\cos 5x \cdot \cos 3x - \sin 3x \cdot \sin x = \cos 2x$
   $\cos 5x \cdot \cos 3x - \sin 3x \cdot \sin x = \cos^2 x - sin^2 x$