

1 Simplify the following expressions.

a $\cos^2 2x + \sin^2 2x$

b $\cos^2 3x - 1$

c $\sqrt{(1 - \sin^2 4\theta)}$

d $\frac{\sqrt{1 - \cos^2 2\theta}}{\sqrt{1 - \sin^2 2\theta}}$

e $(\cos A - \sin A)^2$

f $\frac{\tan x}{\sin x}$

g $\sin^2 x(1 - \cos^2 x)$

h $\cos^2 x + (1 - \sin x)^2$

i $\frac{\sqrt{(1 - \sin^2 \theta)}}{\sin \theta}$

Choose either the LHS or the RHS to work with.