BEYOND EXCELLENCE -33

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Where the extreme challenges excellence.

1)Prove that the derivative of
Cos^{-1} [Cos 3θ /$\text{Cos}^3\theta$] with respect to θ

is 3 /√(Cos θ Cos 3θ)

2) If X = a + b Cos x + c Sin x and,
$y = (a^2-b^2-c^2)^{-½}\ \text{Cos}^{-1}\{[aX-a^2+b^2+c^2] /[X(b^2+c^2)^{½}]\}$
show that dy/dx =1/X.

1)
Cos^{-1} [Cos 3θ /$\text{Cos}^3\theta$] හි θ විෂයෙහි අවකල සංගුණකය

{ 3 /√(Cos θ Cos 3θ)

බව පෙන්වන්න.

2) X = a + b Cos x + c Sin x හා
$y=(a^2-b^2-c^2)^{-½}\ \text{Cos}^{-1}\{[aX-a^2+b^2+c^2]/[X(b^2+c^2)^{½}]\}$ නම් dy/dx =1/X බව පෙන්වන්න.