

The dual Ghosh identity

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the dual Ghosh identity.
The paper ends with "The End"

Introduction

The dual Ghosh identity is useful in many fields including engineering,
economics, finance, statistics and mathematics.
In this paper, I describe the dual Ghosh identity.

The dual Ghosh identity

$$\begin{aligned} & 8(a+b+c)^3 - (a+b+c+x)^3 - (a+b+c+y)^3 - (a+b+c+z)^3 - 3(a+b+c-x)(a+b+c-y)(a+b+c-z) \\ & = \\ & (a+b+c+x+y+z) (2a^2 + 4ab + 4ac - 2ax - 2ay - 2az + 2b^2 + 4bc - 2bx - 2by - 2bz + 2c^2 - 2cx - 2cy - 2cz - x^2 + xy + xz - y^2 + yz - z^2) \end{aligned}$$

The End