

Partial Differential Equations

Avery Karlin

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Contents

Primary Textbook:
Teacher:

1 Introduction

Needed - Partial Derivatives - Ordinary Differential Equations - Green Theorem, Divergence, Etc -

Complex Numbers - $\overline{z + w} = \overline{z} + \overline{w}$, $\overline{zw} = \overline{z} * \overline{w}$ - $z * \overline{z} = |z|^2$ -

$a^2 + b^2 - z(-1) = \overline{z}/(|z|^2)$, $z! = 0$ - *is a field (closure under +, *, associative for both, distributive, identity for both)*

$|zw| = |z||w|$, *s.t. product of unit vectors is a unit vector*