ACHARYA NARENDRA DEV COLLEGE

(UNIVERSITY OF DELHI)

GOVINDPURI, NEW DELHI-110019



**BSc. Physics Hons. (III Semester)**

**GE Practical File:**

**DIFFERENTIAL EQUATIONS**

Submitted To:

Dr. De0 Datta Aarya

Submitted by:

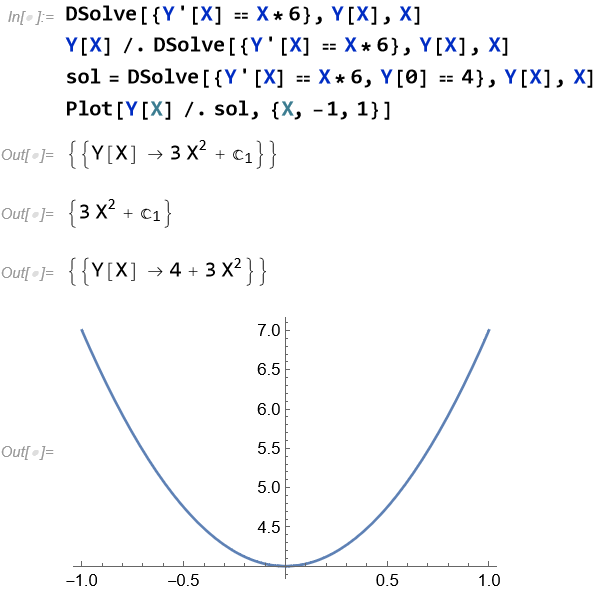
Devanshi Mitra

AD-815  
21001567013

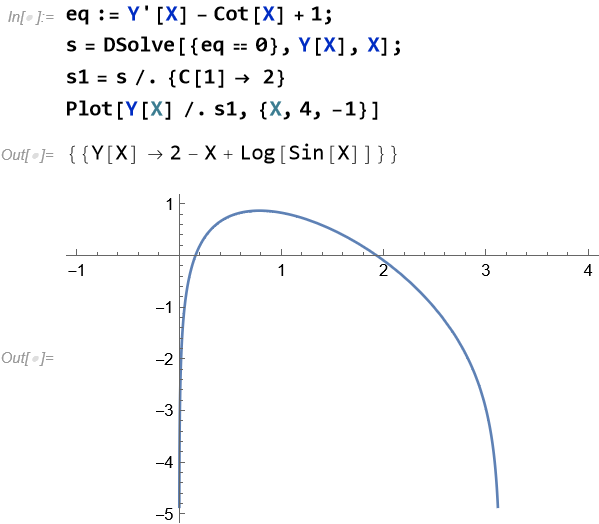
1. Solution of First Order of Differential

Equation

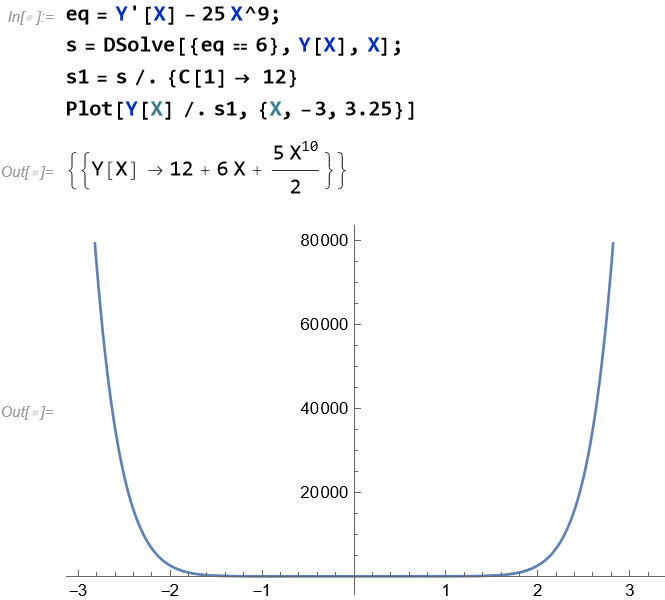
Example 1:



Example 2:



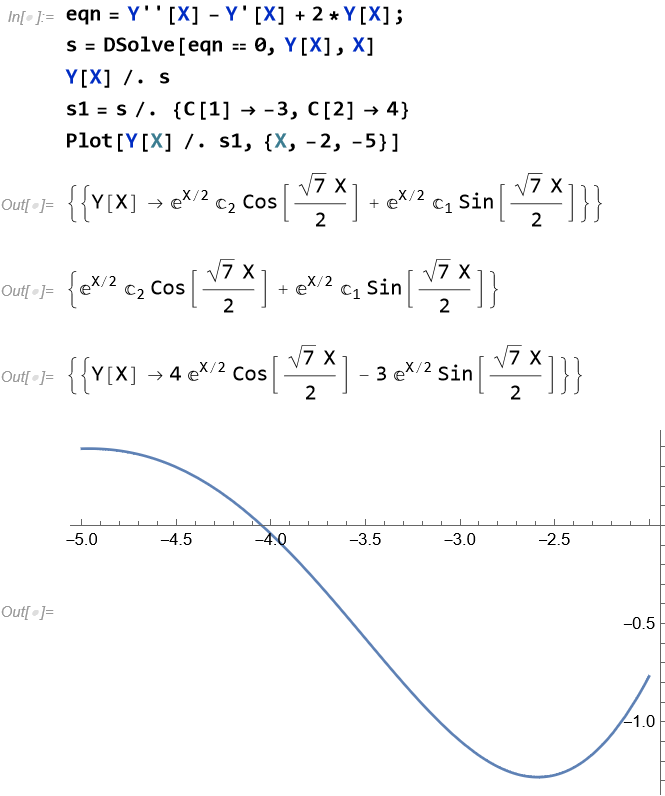
Example 3:



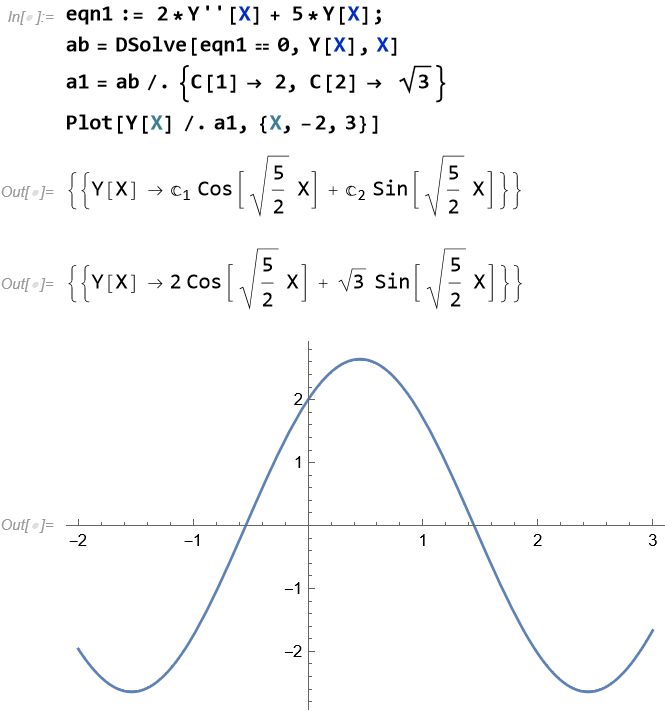
2. Plotting of Second Order Solution

Family of Differential Equation

Example 4:



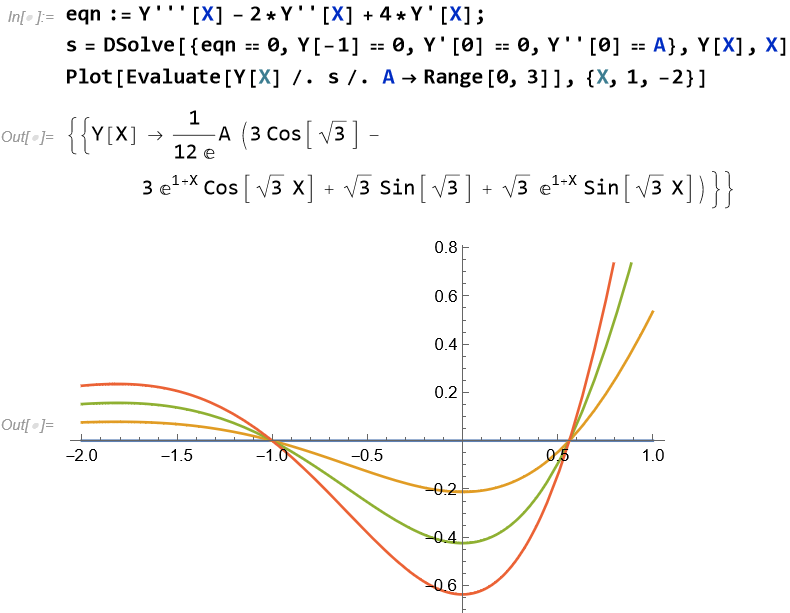
Example 5:



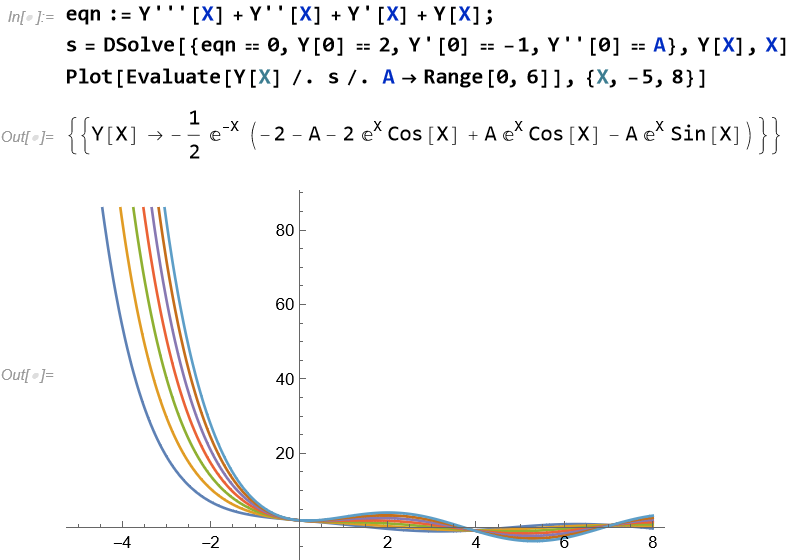
3. Plotting of Third Order Solution

Family of Differential Equation

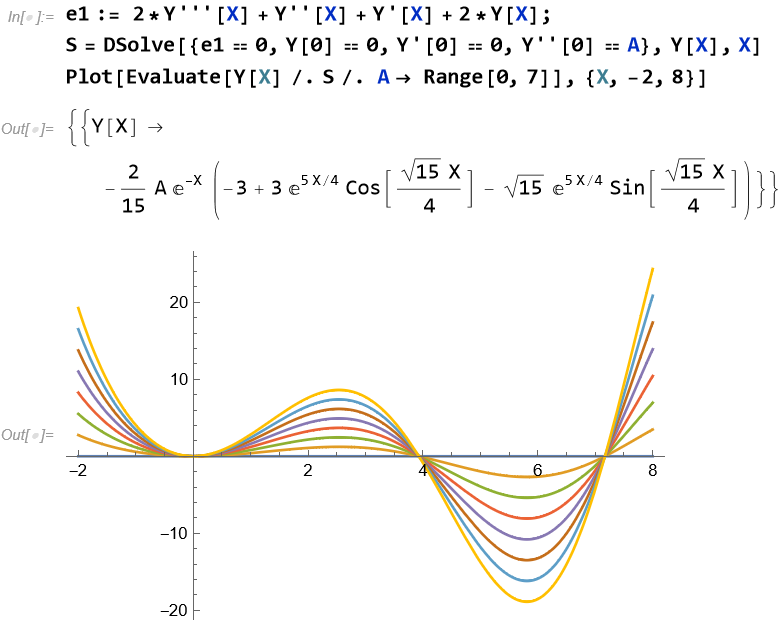
Example 6:



Example 7:



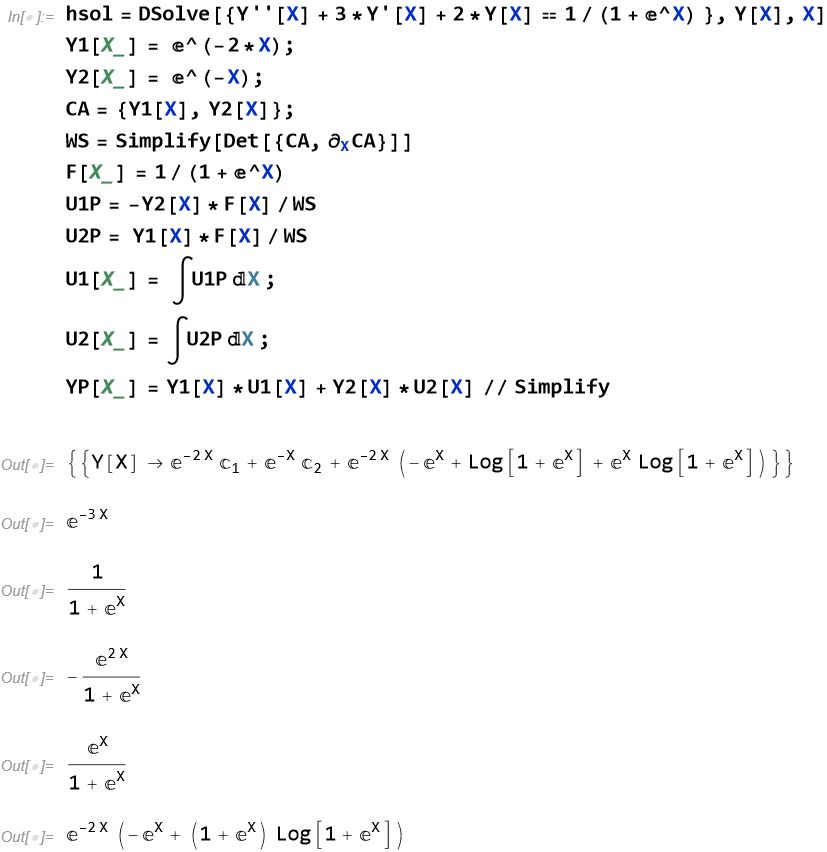
Example 8:



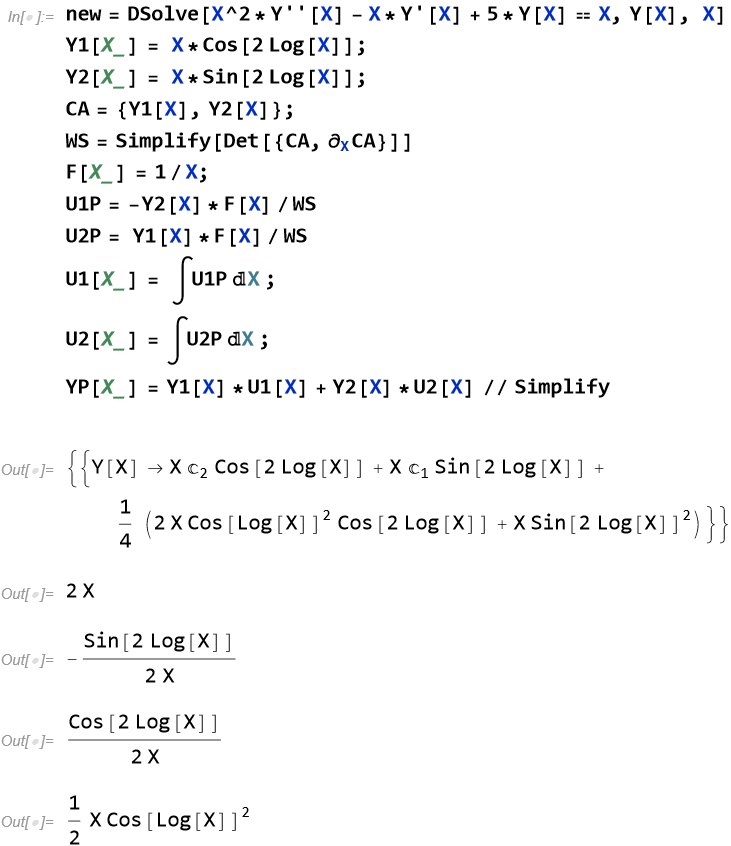
4. Solution of Differential Equation by

Variation of Parameter Method

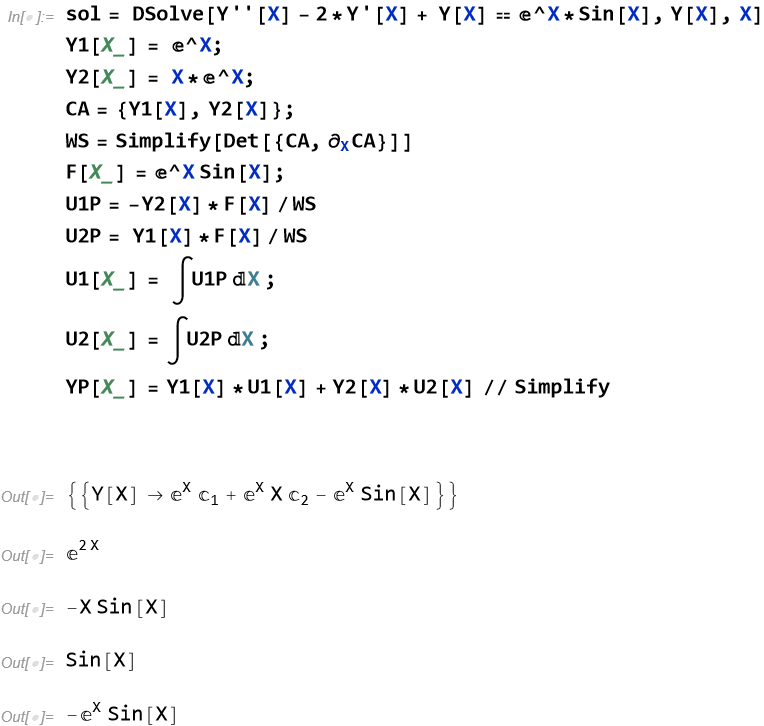
Example 9:



Example 10:

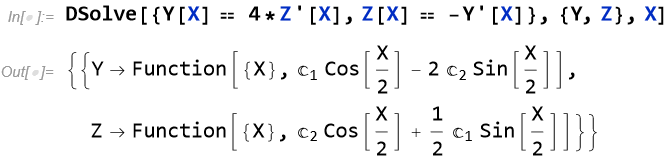


Example 11:

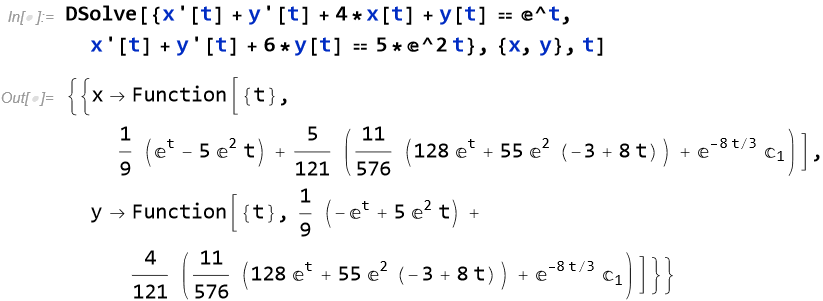


5. Solution of System of Ordinary Differential Equations

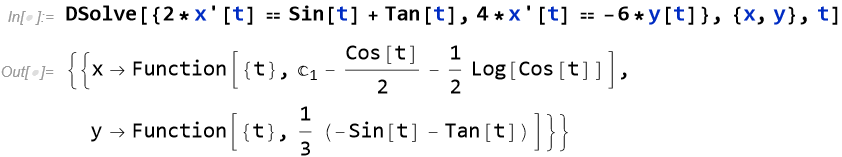
Example 12:



Example 13:



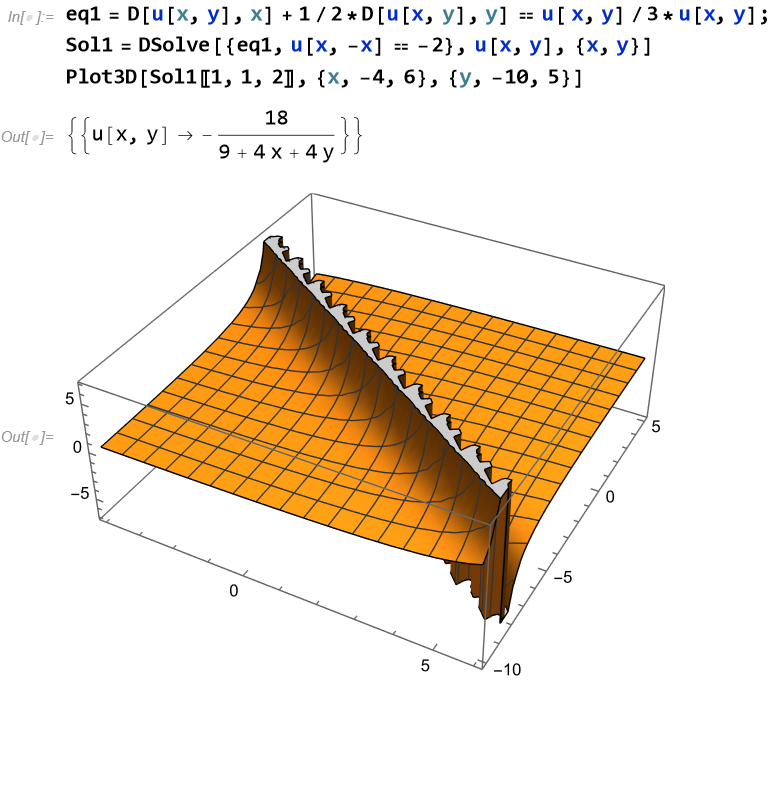
Example 14:



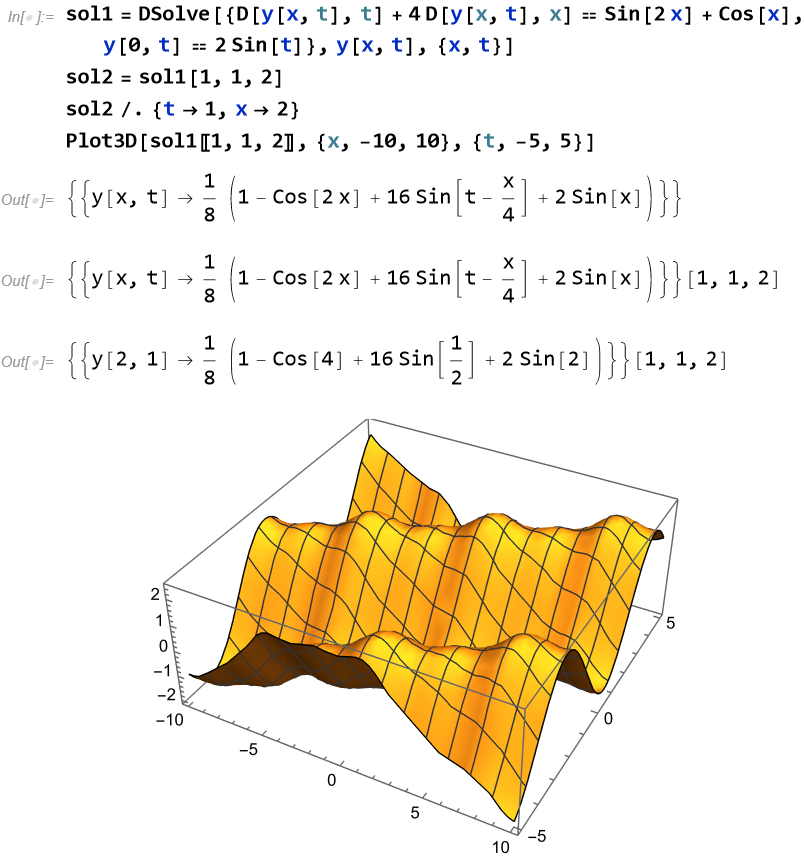
6. Solution of Cauchy problem for First

Order Partial differential Equation

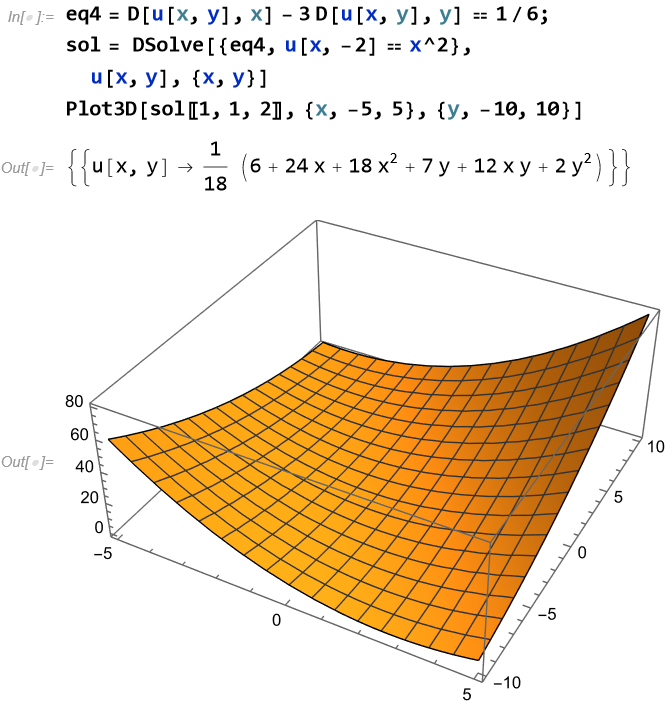
Example 15:



Example 16:



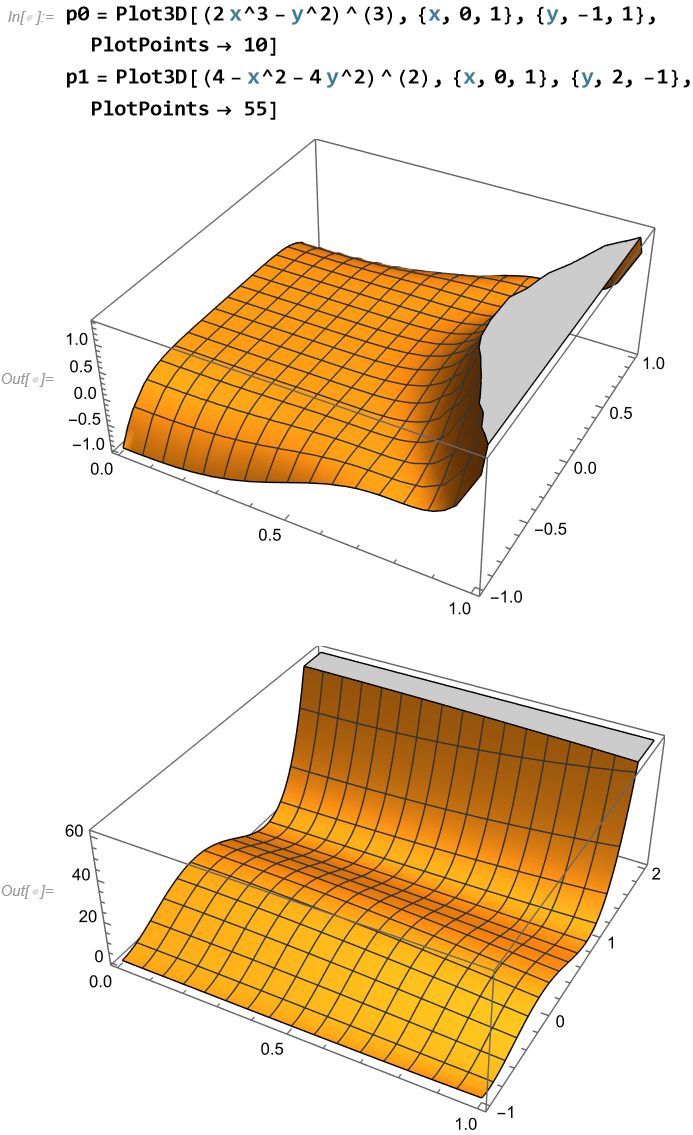
Example 17:



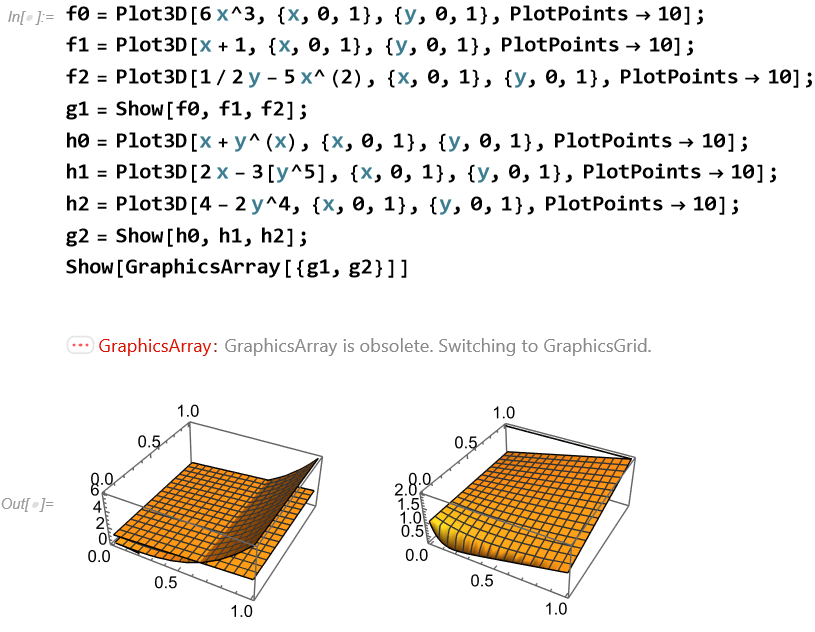
7. Plotting the Characteristics of the

First Order Partial Differential Equations

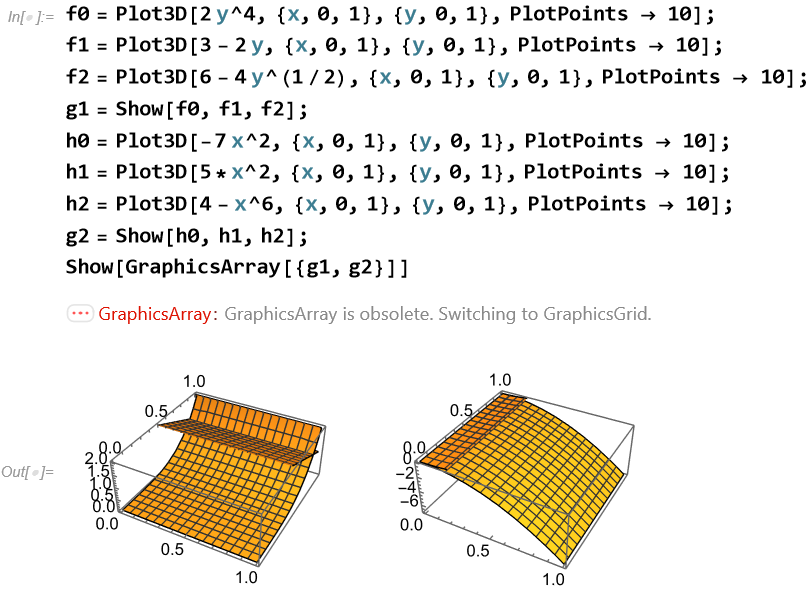
Example 18:



Example 19:



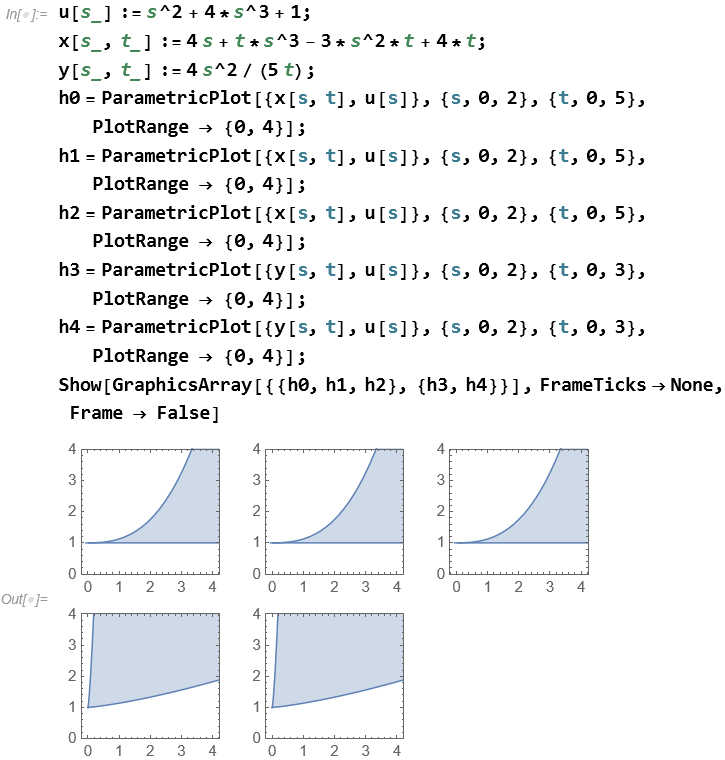
Example 20:



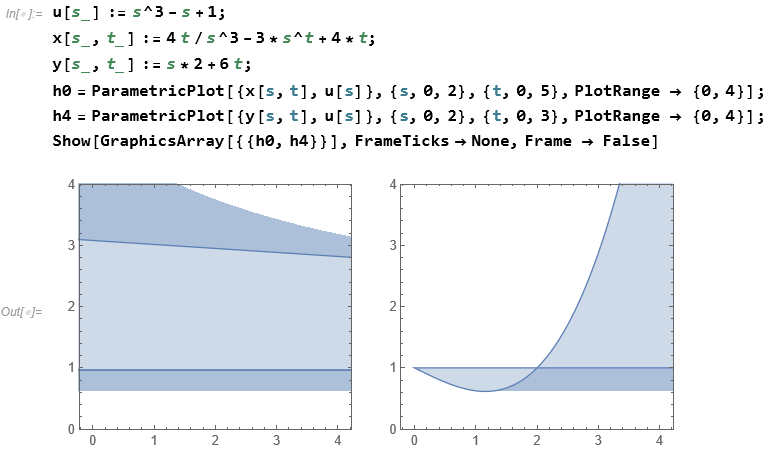
8. Plot the Integral Surfaces of First

Order Partial Differential Equations with Initial Data

Example 21:



Example 22:



Example 23:

