



Art's Commerce and Science College, Onda Tal:- Vikramgad, Dist:- Palghar

My Inspiration
Late. Shivalal
Dhamone
and
Shri. V. G. Patil
Saheb

Subject Teacher
Santosh Dhamone

Practical No 4 : Find complete integral of first order PDE using Charpit's Method.

Subject Teacher
Santosh Dhamone

Assistant Professor in Mathematics
Art's Commerce and Science College, Onda
Tal:- Vikramgad, Dist:- Palghar

ssdhamone@acscollegeonda.ac.in

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Practical No 4 : Find complete integral of first order PDE using Charpit's Method

Problem 1:

Solve the PDE $(p^2 + q^2)y = qz$ by Charpit's method

Problem 2:

Solve the PDE $p = (z + qy)^2$ by Charpit's method

Problem 3:

Solve the PDE $2xz - px^2 - 2qxy + pq = 0$ by Charpit's method

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Problem 4:

Solve the PDE $2(z + xp + yq) = yp^2$ by Charpit's method

Problem 5:

Solve the PDE $pxy + pq + qy = yz$ by Charpit's method

Problem 6:

Solve the PDE $p^2x + q^2y = z$ by Charpit's method

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Problem 7:

Solve the PDE $p^2x + qy = z$ by Charpit's method

Problem 8:

Solve the PDE $p + q = pq$

Problem 9:

Solve the PDE $p^2z^2 + q^2 = 1$

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Problem 10:

Solve the PDE $pq + q^3 = 3pzq$

Problem 11:

Find the complete integral of $z^2(p^2z^2 + q^2) = 1$

Problem 12:

Find the complete integral of $q^2 = z^2p^2(1 - p^2)$

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Problem 13:

Find the complete integral of $p^2 + q^2 = x + y$

Problem 14:

Find the complete integral of $p^2 y(1 + x^2) = qx^2$

Problem 15:

Find the complete integral of $(p + q)(z - px - qy) = 1$

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