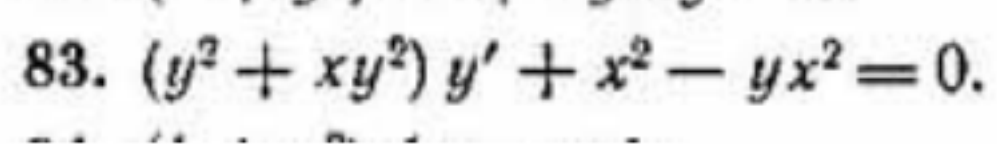


```

> restart
> with(DEtools)
[AreSimilar, DENormal, DEplot, DEplot3d, DEplot_polygon, DFactor, DFactorLCLM,
DFactorsols, Dchangevar, FunctionDecomposition, GCRD, Gosper, Heunsols,
Homomorphisms, IVPsol, IsHyperexponential, LCLM, MeijerGsols,
MultiplicativeDecomposition, ODEInvariants, PDEchangecoords, PolynomialNormalForm,
RationalCanonicalForm, ReduceHyperexp, RiemannPsols, Xchange, Xcommutator, Xgauge,
Zeilberger, abelsol, adjoint, autonomous, bernoullisol, buildsol, buildsym, canoni, caseplot,
casesplit, checkrank, chinisol, clairautsol, constcoeffsols, convertAlg, convertsys,
dalembertsol, dcoeffs, de2diffop, dfieldplot, diff_table, diffop2de, dperiodic_sols, dpolyform,
dsols, eigenring, endomorphism_charpoly, equinv, eta_k, eulersols, exactsol, expsols,
exterior_power, firint, firtest, formal_sol, gen_exp, generate_ic, genhomosol, gensys,
hamilton_eqs, hypergeomsols, hyperode, indicialeq, infgen, initialdata, integrate_sols,
intfactor, invariants, kovacicols, leftdivision, liesol, line_int, linearsol, matrixDE,
matrix_riccati, maxdimsystems, moser_reduce, muchange, mult, mutest, newton_polygon,
normalG2, ode_int_y, ode_y1, odeadvisor, odepde, parametricsol, particularsol,
phaseportrait, poincare, polysols, power_equivalent, rational_equivalent, ratsols, redode,
reduceOrder, reduce_order, regular_parts, regularsp, remove_RootOf, riccati_system,
riccatisol, rifread, rifsimp, rightdivision, rtaylor, separablesol, singularities, solve_group,
super_reduce, symgen, symmetric_power, symmetric_product, symtest, transinv, translate,
untranslate, varparam, zoom]

```

> 

```

> Ecuacion := (y(x)·2 + x·y(x)·2)·diff(y(x), x) + x·2 - y(x)·x·2 = 0
      Ecuacion := (y(x)2 + x y(x)2) ( d/dx y(x) ) + x2 - y(x) x2 = 0

```

```

> odeadvisor(Ecuacion)
      [_separable]

```

```

> M := factor(x·2 - y·x·2)
      M := -x2 (-1 + y)

```

```

> N := factor(y·2 + x·y·2)
      N := y2 (1 + x)

```

```

> P := -x·2; Q := (-1 + y); R := 1 + x; S := y·2
      P := -x2
      Q := -1 + y
      R := 1 + x
      S := y2

```

```

> SolGral := int(P/R, x) + int(S/Q, y) = C1

```

$$SolGral := -\frac{1}{2} x^2 + x - \ln(1 + x) + y + \frac{1}{2} y^2 + \ln(-1 + y) = C_1 \quad (7)$$

$$> SolComp := -\frac{1}{2} x^2 + x - \ln(1 + x) + y(x) + \frac{1}{2} y(x)^2 + \ln(-1 + y(x)) = C_1$$

$$SolComp := -\frac{1}{2} x^2 + x - \ln(1 + x) + y(x) + \frac{1}{2} y(x)^2 + \ln(-1 + y(x)) = C_1 \quad (8)$$

$$> CompUno := simplify(isolate(diff(SolComp, x), diff(y(x), x)))$$

$$CompUno := \frac{d}{dx} y(x) = \frac{x^2(-1 + y(x))}{(1 + x)y(x)^2} \quad (9)$$

$$> CompDos := isolate(Ecuacion, diff(y(x), x))$$

$$CompDos := \frac{d}{dx} y(x) = \frac{-x^2 + y(x)x^2}{y(x)^2 + xy(x)^2} \quad (10)$$

$$> ComprobacionFinal := simplify(rhs(CompUno) - rhs(CompDos)) = 0$$

$$ComprobacionFinal := 0 = 0 \quad (11)$$