Równania Różniczkowe i Różnicowe

Zadania – równania Lagrange'a, Clairauta

1.
$$y = y'x^2 + x$$

2.
$$y = (y')^2 \sin^2 x$$

3.
$$x = y(y')2$$

4.
$$x = y'(\ln y' - 1)$$

5.
$$y(y')^2 + 2xy' = y$$

6.
$$y = \ln y' (1 - xy') + xy'$$

7.
$$y = \frac{1}{2}xy + \arcsin y'$$

8.
$$y = x(y' - \operatorname{ctg} y') + (y')^2$$

9.
$$y + x(y' + 2) = \frac{1}{3}(y')^3$$

10.
$$y = y'x + e^y$$

11.
$$y = y'x + (y')^3$$

12.
$$y = y'x + \sqrt{1 - (y')^2} + y' \arcsin y'$$

13.
$$y = y'x + y'\sin y'$$