12) $y^3x^2 - x\sin(x) + y^5 = 0$

$3y^2\left(\frac{dy}{dx}\right)x^2 + y^3 2x - \sin(x) + x\cos(x) + 5y^4\left(\frac{dy}{dx}\right) = 0$

$3y^2x^2 + 5y^4\left(\frac{dy}{dx}\right) = -y^3 2x + \sin(x) - x\cos(x)$

$$\frac{-y^3 2x + \sin(x) - x\cos(x)}{3y^2x^2 + 5y^4} = \frac{dy}{dx}$$