1. $8x^2 + y^2 = 10$

$16x + 2y\,y' = 10$

$y' = \dfrac{10 - 16x}{2y}$

$$\boxed{y' = \frac{5 - 8x}{y}}$$

2. $4x^3 - 2y^3 = x$

$12x^2 - 6y^2 y' = 1$

$$\boxed{y' = \frac{1 - 12x^2}{-6y^2}}$$

3. $2x^3 + x^2 y + y^3 = 1$

$6x^2 + x^2 y' + y(2x) + 3y^2 y' = 0$

$y'(x^2 + 3y^2) = -6x^2 + 2xy$

$$\boxed{y' = \frac{-6x^2 + 2xy}{x^2 + 3y^2}}$$