$$1. y = \frac{1}{\sqrt{1 - x^4 - x^2}}$$

$$2. y = e^{\sqrt{x + \sqrt{x}}}$$

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

$$4. y = \sqrt{x + \sqrt{x + \sqrt{x}}}$$