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

$$y = \frac{1}{x^2 + 1}$$

$$y = \frac{x - 2}{x^2}$$

$$y = \frac{1}{x} + 4x$$

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

$$y = \sqrt{\frac{x - 1}{x + 2}}$$

$$y = x\sqrt{x - 2}$$

$$y = \sqrt{3x - x^2}$$

$$y = xe^{-x}$$

$$y = (x + 1)e^{x}$$

$$y = (x - 1)e^{2-x}$$

$$y = e^{3x} - 3e^{x}$$

$$y = \frac{1}{\ln x}$$

$$y = \frac{x}{\ln x}$$

$$y = \frac{\ln x}{x}$$

$$y = \ln^2 x$$