895.
$$y = \ln(x + \sqrt{x^2 + 1})$$
.

896.
$$y = x \ln(x + \sqrt{1 + x^2}) - \sqrt{1 + x^2}$$
.

897.
$$y = x \ln^2(x + \sqrt{1 + x^2})$$

$$-2\sqrt{1+x^2} \ln(x+\sqrt{1+x^2})+2x$$

898.
$$y = \frac{x}{2} \sqrt{x^2 + a^2} + \frac{a^2}{2} \ln(x + \sqrt{x^2 + a^2})$$
.

899.
$$y = \frac{1}{2\sqrt{ab}} \text{ in } \frac{\sqrt{a} + x\sqrt{b}}{\sqrt{a} - x\sqrt{b}}$$
 (a>0, b>0).

900.
$$y = \frac{2+3x^2}{x^4} \sqrt{1-x^2} + 3 \ln \frac{1+\sqrt{1-x^2}}{x}$$
.

901.
$$y = \ln \lg \frac{x}{2}$$
. 902. $y = \ln \lg \left(\frac{x}{2} + \frac{\pi}{4} \right)$.

903.
$$y = \frac{1}{2} \operatorname{ctg}^2 x + \ln \sin x$$
.

904.
$$y = \ln \sqrt{\frac{1 - \sin x}{1 + \sin x}}$$
.

905.
$$y = -\frac{\cos x}{2\sin^2 x} + \ln \sqrt{\frac{1 + \cos x}{\sin x}}$$

906.
$$y = \ln \frac{b + a \cos x + \sqrt{b^2 - a^2} \sin x}{a + b \cos x}$$

$$(0 \leq |\alpha| < |b|).$$

907.
$$y = \frac{1}{x} (\ln^3 x + 3 \ln^2 x + 6 \ln x + 6)$$
.

908.
$$y = \frac{1}{4x^3} \ln \frac{1}{x} - \frac{1}{16x^4}$$
.

909.
$$y = \frac{3}{2} (1 - \sqrt[3]{1 + x^2}) + 3 \ln (1 + \sqrt[3]{1 + x^2})$$

910.
$$y = \ln \left[\frac{1}{x} + \ln \left(\frac{1}{x} + \ln \frac{1}{x} \right) \right]$$
.

911.
$$y = x [\sin(\ln x) - \cos(\ln x)].$$

912.
$$y = \ln \lg \frac{x}{2} - \cos x \cdot \ln \lg x$$
.

913.
$$y = \arcsin \frac{x}{2}$$
.