1479.
$$y = \frac{x^3(x-1)}{(x+1)^2}$$
. 1480. $y = \frac{x}{(1-x^2)^2}$.

1481.
$$y = \frac{(x+1)^3}{(x-1)^2}$$
. 1482*. $y = \frac{x^4+8}{x^5+1}$.

1483.
$$y = \frac{1}{1+x} - \frac{10}{3x^2} + \frac{1}{1-x}$$
. 1484. $y = (x-3)\sqrt{x}$.

1485.
$$y = \pm \sqrt{8x^2 - x^4}$$
. 1485.1. $y = \frac{x - 2}{\sqrt{x^2 + 1}}$.

1486.
$$y = \pm \sqrt{(x-1)(x-2)(x-3)}$$
.

1487*.
$$y = \sqrt[3]{x^3 - x^2 - x + 1}$$
.

1488.
$$y = \sqrt[3]{x^2} - \sqrt[3]{x^2 + 1}$$
.

1489.
$$y = (x+2)^{2/3} - (x-2)^{2/3}$$
.

1490.
$$y = (x+1)^{2/3} + (x-1)^{2/3}$$
. 1491. $y = \frac{x}{\sqrt[3]{x^2-1}}$.

1492.
$$y = \frac{x^2 \sqrt{x^2 - 1}}{2x^2 - 1}$$
. 1493. $y = \frac{11 + x^{3/2}}{\sqrt{x}}$.

1494.
$$y = 1 - x + \sqrt{\frac{x^3}{3+x}}$$
. 1495. $y = \sqrt[3]{\frac{x^3}{x+1}}$.

1496*.
$$y = \sqrt{\frac{x^4+3}{x^2+1}}$$
. 1497. $y = \sin x + \cos^2 x$.

1498.
$$y = (7 + 2\cos x)\sin x$$
. 1499. $y = \sin x + \frac{1}{3}\sin 3x$.

1500.
$$y = \cos x - \frac{1}{2}\cos 2x$$
. 1501. $y = \sin^4 x + \cos^4 x$.

1502.
$$y = \sin x \cdot \sin 3x$$
. 1503. $y = \frac{\sin x}{\sin \left(x + \frac{\pi}{4}\right)}$.

1504.
$$y = \frac{\cos x}{\cos 2x}$$
. 1504.1. $y = \frac{\sin x}{2 + \cos x}$.

1505.
$$y = 2x - \operatorname{tg} x$$
. 1506. $y = e^{2x - x^4}$.

1507.
$$y = (1 + x^2) e^{-x^2}$$
. 1508. $y = x + e^{-x}$.

1509.
$$y = x^{2/3}e^{-x}$$
. 1509.1. $y = e^{-2x}\sin^2 x$.