

1, 4, 9, 10, 12, 13, 19, 20 benötigen zusätzlich die Produkt- oder Quotientenregel!

1  $y = \sin^2 x$

2  $y = 2x + \sqrt{25 - x^2}$

3  $y = \sqrt{4x - 8}$

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

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

6  $y = (3x^4 - x^2 - 4)^2$

7  $y = \sin^3 x$

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

9  $y = e^{-x} \sin x$

10  $y = \frac{18x}{(x^2 + 3)^2}$

11  $y = \sqrt{3x^2 - 1}$

12  $y = x^2 e^{-x}$

13  $y = 2x(3x + 4)^5$

14  $y = \ln(\ln x)$

15  $y = ae^{ax}$

16  $y = \sqrt{\cos x}$

17  $y = \frac{1}{(x^3 - 2x^2 + 5x - 1)^3}$

18  $y = \ln(2x^2 - 8)$

19  $y = \ln \frac{x}{x+a}$

20  $y = \frac{\sin^2 x}{\cos^2 x}$