1

a

$u = 1 + x + \frac{x^2}{2} + ...$

b

$y = 2ax + b$

c

$y = 2x + 2a$

d

$y = 3(x + 2)^2$

2

$\frac{dw}{dt} = a - bt$

3

$\frac{dy}{dx} = 2x$

4

$y = 2822x^5 - 16351x^4 - 748x^3 - 4096x^2 + 1379x$

5

$\frac{dx}{dy} = 2y + 8$

6

7

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

8

$$\frac{9x^2+6x^3+6x^4}{(1+x+2x^2)^2}$$

9

$$\frac{ad-cb}{(cx+d)^2}$$

10

$$\frac{anx^{-n-1}+bnx^{n-1}+2nx^{-1}}{(x^{-n}+b)^2}$$