$y \quad a^{x}$ $y \quad \log_a x$ $a \quad 0$ $a \quad 1$

$y \quad x \quad y \quad x^{2} \quad y \quad x^{3} \quad y \quad \frac{1}{x}$ –

4

$y \quad A\sin(\quad x \quad)$ $y \quad A\sin(\quad x \quad)$

A

n

$$\frac{a \quad b}{2} \quad \sqrt{ab} \qquad (a \quad 0, b \quad 0)$$

$p \qquad q$

$y \quad C \quad C \qquad y \quad x \quad y \quad x^2 \quad y \quad \frac{1}{x}$

$C \qquad (x^n) \quad nx^{n \; 1} \quad n \quad \mathbf{N}$

$(\sin x) \quad \cos x \quad (\cos x) \quad \sin x$

$(\mathrm{e}^x) \quad \mathrm{e}^x \quad (a^x) \quad a^x \ln a \quad a \quad 0 \quad a \quad 1$

$(\ln x) \quad \frac{1}{x} \quad (\log_a x) \quad \frac{1}{x}\log_a \mathrm{e} \quad a \quad 0 \quad a \quad 1$

$[u(x) \quad v(x)] \quad u\ (x) \quad v\ (x)$

$[u(x)v(x)] \quad u\ (x)v(x) \quad u(x)v\ (x)$

$\left(\frac{u(x)}{v(x)}\right) \quad \frac{u\ (x)v(x) \quad u(x)v\ (x)}{v^2(x)} \quad v(x) \quad 0$

$| \quad || \quad | \quad | \qquad |$

$(a^2 \quad b^2)(c^2 \quad d^2) \quad (ac \quad bd)^2$

$\sqrt{\qquad\qquad\qquad\qquad}$ $\sqrt{(x_1 \quad x_3)^2 \quad (y_1 \quad y_3)^2}$

$$\overset{n}{\underset{i\ 1}{}} a_i^2 \quad \overset{n}{\underset{i\ 1}{}} b_i^2 \quad (\overset{n}{\underset{i\ 1}{}} a_i b_i)^2$$

$(1 \quad x)^n \quad 1 \quad nx \qquad x \quad 1 \quad x \quad 0 \quad n$

n