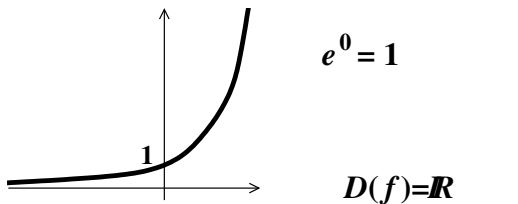
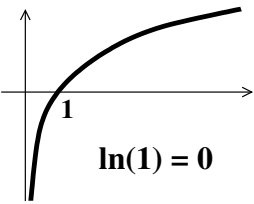
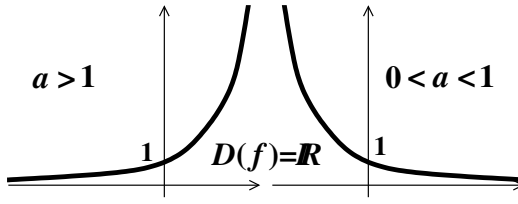
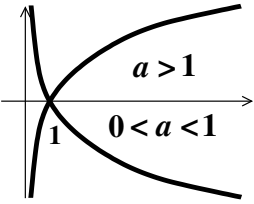
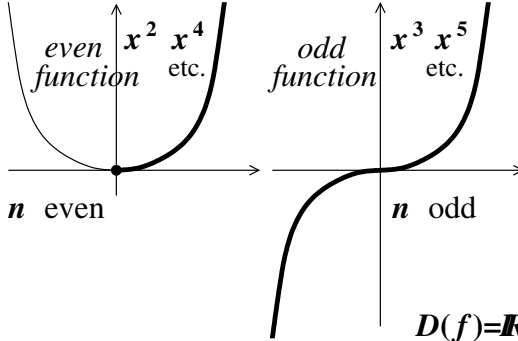
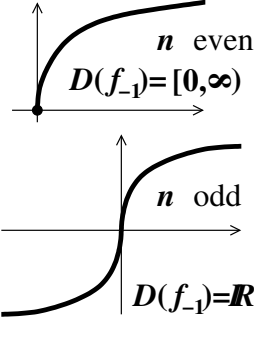
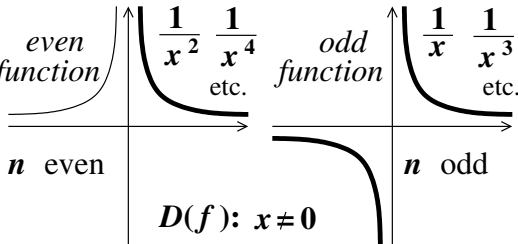
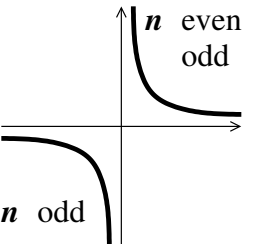
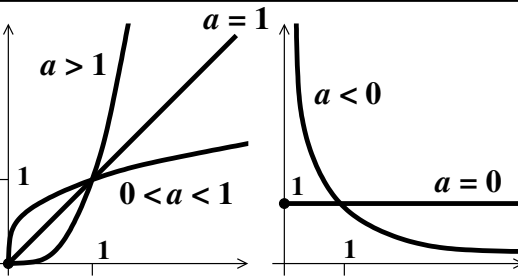
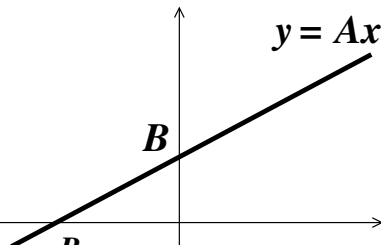
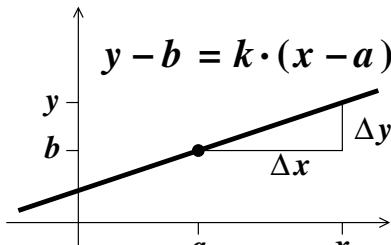
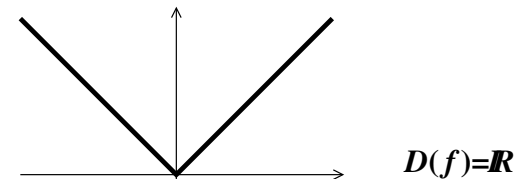


funct f	graph (with 1-1 restriction)	identities	f' $\int f$	inverse f_{-1}	graph f_{-1}	identities	f'_{-1}
e^x		$e^{xy} = (e^x)^y$ $e^{x+y} = e^x \cdot e^y$ $\ln(e^x) = x$ $e^{\ln(x)} = x, x > 0$	e^x $\int f dx = e^x$	$\ln(x)$		$\ln(x^A) = A \ln(x)$ $\ln(x \cdot y) = \ln(x) + \ln(y)$ $\ln(\frac{x}{y}) = \ln(x) - \ln(y)$ $\ln(\frac{1}{x}) = -\ln(x)$	$\frac{1}{x}$
a^x		$a^{xy} = (a^x)^y$ $a^{x+y} = a^x \cdot a^y$ $\log_a(a^x) = x$ $a^{\log_a(x)} = x, x > 0$	$\ln(a) a^x$ $\int f dx = \frac{1}{\ln(a)} a^x$	$\log_a(x)$		$\log_a(x^A) = A \log_a(x)$ $\log_a(x \cdot y) = \log_a(x) + \log_a(y)$ $\log_a(\frac{x}{y}) = \log_a(x) - \log_a(y)$	$\frac{1}{\ln(a)} \frac{1}{x}$
x^n $n \in \mathbf{N}$		$x^{m+n} = x^m \cdot x^n$ $(x \cdot y)^n = x^n \cdot y^n$ $(\frac{x}{y})^n = \frac{x^n}{y^n}$	$n \cdot x^{n-1}$ $\int f dx = \frac{1}{n+1} x^{n+1}$	$x^{\frac{1}{n}} = \sqrt[n]{x}$		$\sqrt[n]{x \cdot y} = \sqrt[n]{x} \cdot \sqrt[n]{y}$ $\sqrt[n]{\frac{x}{y}} = \frac{\sqrt[n]{x}}{\sqrt[n]{y}}$	$\frac{1}{n} x^{\frac{1}{n}-1}$ $[\sqrt{x}]' = \frac{1}{2\sqrt{x}}$
$\frac{1}{x^n} = x^{-n}$ $n \in \mathbf{N}$		see \updownarrow	$\int \frac{1}{x} dx = \ln x $	$x^{-\frac{1}{n}} = \frac{1}{\sqrt[n]{x}}$			
x^a $a \in \mathbf{R}$		$x^{a+b} = x^a \cdot x^b$ $(x \cdot y)^a = x^a \cdot y^a$ $(\frac{x}{y})^a = \frac{x^a}{y^a}$	$a \cdot x^{a-1}$ $\int f dx = \begin{cases} \ln x , a = -1 \\ \frac{1}{a+1} x^{a+1} \end{cases}$				
$ x $		$ x = \begin{cases} x, x \geq 0; \\ -x, x < 0 \end{cases}$ $= \begin{cases} x, x > 0; \\ -x, x \leq 0. \end{cases}$	$\begin{cases} 1, x > 0; \\ \text{DNE}, x = 0; \\ -1, x < 0. \end{cases}$				$k = \frac{\Delta y}{\Delta x}$