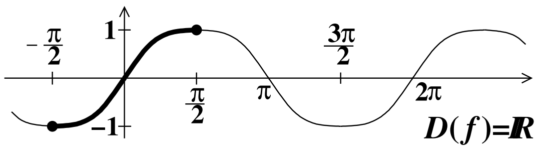
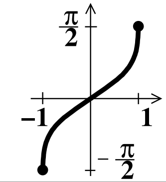
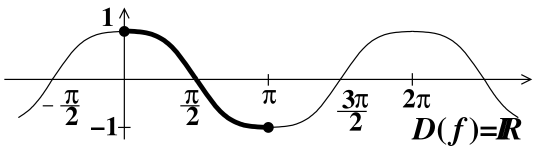
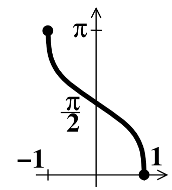
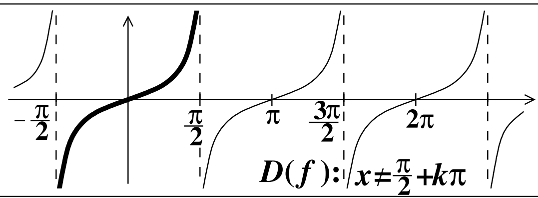
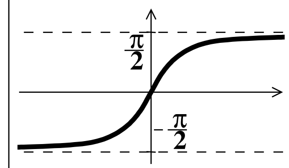
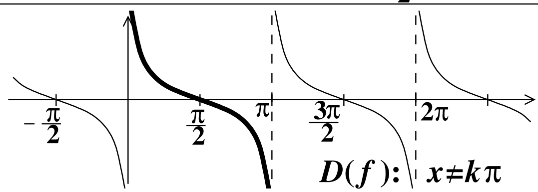
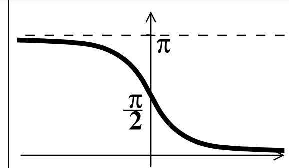
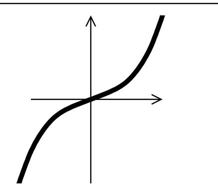
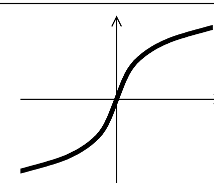
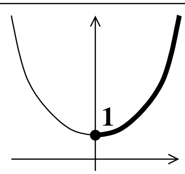
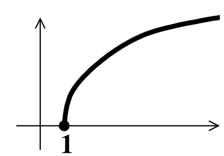
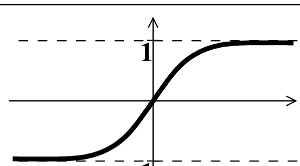
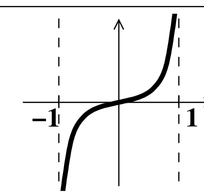
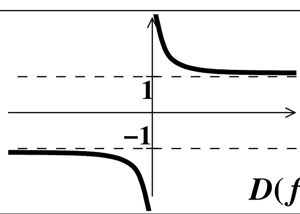
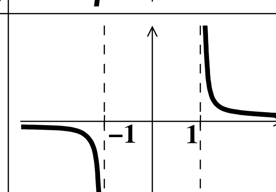
funct f	graph (with 1−1 restriction)	identities	f' $\int f$	inverse f_{-1}	graph f_{-1}	f_{-1}'
$\sin(x)$ $=\frac{e^{ix}-e^{-ix}}{2i}$ *odd*, $T=2\pi$	 $D(f)=\mathbb{R}$	$\sin(x+y)=\sin(x)\cos(y)+\cos(x)\sin(y)$ $\sin(2x)=2\sin(x)\cos(x)$ $\sin^2(x)=\frac{1-\cos(2x)}{2}$	$\cos(x)$ $\int f\,dx=$ $-\cos(x)$	$\arcsin(x)$ $D(f_{-1})=[-1,1]$		$\frac{1}{\sqrt{1-x^2}}$ $D(f_{-1}')=(-1,1)$
	$\sin(0)=\frac{\sqrt{0}}{2}=0$ $\sin(\frac{\pi}{6})=\frac{\sqrt{1}}{2}=\frac{1}{2}$ $\sin(\frac{\pi}{4})=\frac{\sqrt{2}}{2}$ $\sin(\frac{\pi}{3})=\frac{\sqrt{3}}{2}$ $\sin(\frac{\pi}{2})=\frac{\sqrt{4}}{2}=1$ $\sin^2(x)+\cos^2(x)=1$					
$\cos(x)$ $=\frac{e^{ix}+e^{-ix}}{2}$ *even*, $T=2\pi$	 $D(f)=\mathbb{R}$	$\cos(x+y)=\cos(x)\cos(y)-\sin(x)\sin(y)$ $\cos(2x)=\cos^2(x)-\sin^2(x)$ $\cos^2(x)=\frac{1+\cos(2x)}{2}$	$-\sin(x)$ $\int f\,dx=$ $\sin(x)$	$\arccos(x)$ $D(f_{-1})=[-1,1]$		$\frac{-1}{\sqrt{1-x^2}}$ $D(f_{-1}')=(-1,1)$
$\tan(x)$ $=\mathrm{tg}(x)$ $=\frac{\sin(x)}{\cos(x)}$ *odd*, $T=\pi$	 $D(f)$: $x\neq\frac{\pi}{2}+k\pi$	$\tan(x+y)=\frac{\tan(x)+\tan(y)}{1-\tan(x)\tan(y)}$ $\tan(2x)=\frac{2\tan(x)}{1-\tan^2(x)}$	$\frac{1}{\cos^2(x)}$ $\int f\,dx=$ $-\ln\lvert\cos(x)\rvert$	$\arctan(x)$ $=\mathrm{arctg}(x)$ $D(f_{-1})=\mathbb{R}$		$\frac{1}{x^2+1}$ $D(f_{-1}')=\mathbb{R}$
$\cot(x)$ $=\frac{\cos(x)}{\sin(x)}$ *odd*, $T=\pi$	 $D(f)$: $x\neq k\pi$	$\cot(x+y)=\frac{\cot(x)\cot(y)-1}{\cot(x)+\cot(y)}$ $\cot(2x)=\frac{\cot^2(x)-1}{2\cot(x)}$	$\frac{-1}{\sin^2(x)}$	$\mathrm{arccot}(x)$ $D(f_{-1})=\mathbb{R}$		$\frac{-1}{x^2+1}$ $D(f_{-1}')=\mathbb{R}$
$\sinh(x)$ $=\frac{e^{x}-e^{-x}}{2}$ *odd*	 $D(f)=\mathbb{R}$	$\sinh(x+y)=\sinh(x)\cosh(y)+\cosh(x)\sinh(y)$ $\sinh(2x)=2\sinh(x)\cosh(x)$ $\sinh^2(x)=\frac{\cosh(2x)-1}{2}$	$\cosh(x)$ $\int f\,dx=$ $\cosh(x)$	$\mathrm{argsinh}(x)$ $=\ln\left(x+\sqrt{x^2+1}\right)$ $D(f_{-1})=\mathbb{R}$		$\frac{1}{\sqrt{x^2+1}}$ $D(f_{-1}')=\mathbb{R}$
		$\cosh^2(x)-\sinh^2(x)=1$				
$\cosh(x)$ $=\frac{e^{x}+e^{-x}}{2}$ *even*	 $D(f)=\mathbb{R}$	$\cosh(x+y)=\cosh(x)\cosh(y)+\sinh(x)\sinh(y)$ $\cosh(2x)=\cosh^2(x)+\sinh^2(x)$ $\cosh^2(x)=\frac{\cosh(2x)+1}{2}$	$\sinh(x)$ $\int f\,dx=$ $\sinh(x)$	$\mathrm{argcosh}(x)$ $=\ln\left(x+\sqrt{x^2-1}\right)$ $D(f_{-1})=[1,\infty)$		$\frac{1}{\sqrt{x^2-1}}$ $D(f_{-1}')=(1,\infty)$
$\tanh(x)$ $=\mathrm{tgh}(x)$ $=\frac{\sinh(x)}{\cosh(x)}$ *odd*	 $D(f)=\mathbb{R}$	$\tanh(x+y)=\frac{\tanh(x)+\tanh(y)}{1+\tanh(x)\tanh(y)}$ $\tanh(2x)=\frac{2\tanh(x)}{1+\tanh^2(x)}$	$\frac{1}{\cosh^2(x)}$ $\int f\,dx=$ $\ln\lvert\cosh(x)\rvert$	$\mathrm{argtanh}(x)$ $=\mathrm{argtgh}(x)$ $=\frac{1}{2}\ln\left(\frac{1+x}{1-x}\right)$ $D(f_{-1})=(-1,1)$		$\frac{1}{1-x^2}$ $D(f_{-1}')=(-1,1)$
$\coth(x)$ $=\frac{\cosh(x)}{\sinh(x)}$ *odd*	 $D(f)$: $x\neq 0$	$\coth(x+y)=\frac{1+\coth(x)\coth(y)}{\coth(x)+\coth(y)}$ $\coth(2x)=\frac{1+\coth^2(x)}{2\coth(x)}$	$\frac{-1}{\sinh^2(x)}$	$\mathrm{argcoth}(x)$ $=\frac{1}{2}\ln\left(\frac{x+1}{x-1}\right)$ $D(f_{-1})$: $\lvert x\rvert>1$		$\frac{1}{1-x^2}$ $D(f_{-1}')$: $\lvert x\rvert>1$