

An2 # 1 Integral An2 # 2 Integral An2 # 3 Integral An2 # 4 Integral

$\int x^n dx$

$\int \frac{dx}{x}$

$\int e^x dx$

$\int a^x dx$

An2 # 5 Integral An2 # 6 Integral An2 # 7 Integral An2 # 8 Integral

$\int \sin(x) dx$

$\int \cos(x) dx$

$\int \tan(x) dx$

$\int \cot(x) dx$

An2 # 9 Integral An2 # 10 Integral An2 # 11 Integral An2 # 12 Integral

$\int \frac{dx}{\cos^2(x)}$

$\int \frac{dx}{\sin^2(x)}$

$\int \sinh(x) dx$

$\int \cosh(x) dx$

An2 # 13 Integral An2 # 14 Integral An2 # 15 Integral An2 # 16 Integral

$\int \tanh(x) dx$

$\int \coth(x) dx$

$\int \frac{dx}{\cosh^2(x)}$

$\int \frac{dx}{\sinh^2(x)}$

# 4	Antwort	# 3	Antwort	# 2	Antwort	# 1	Antwort
	$\frac{a^x}{\ln(a)}$		e^x		$\ln x $		$\frac{x^{n+1}}{n+1}$

# 8	Antwort	# 7	Antwort	# 6	Antwort	# 5	Antwort
	$\ln \sin(x) $		$-\ln \cos(x) $		$\sin(x)$		$-\cos(x)$

# 12	Antwort	# 11	Antwort	# 10	Antwort	# 9	Antwort
	$\sinh(x)$		$\cosh(x)$		$-\cot(x)$		$\tan(x)$

# 16	Antwort	# 15	Antwort	# 14	Antwort	# 13	Antwort
	$-\coth(x)$		$\tanh(x)$		$\ln \sinh(x) $		$\ln \cosh(x) $

<i>An2</i>	# 17	<i>Integral</i>	<i>An2</i>	# 18	<i>Integral</i>	<i>An2</i>	# 19	<i>Integral</i>	<i>An2</i>	# 20	<i>Integral</i>
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$$\int \frac{dx}{a^2 + x^2}$$

$$\int \frac{dx}{a^2 - x^2}$$

$$\int \frac{dx}{x^2 - a^2}$$

$$\int \frac{dx}{\sqrt{a^2 - x^2}}$$

<i>An2</i>	# 21	<i>Integral</i>	<i>An2</i>	# 22	<i>Integral</i>
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$$\int \frac{dx}{\sqrt{a^2 + x^2}}$$

$$\int \frac{dx}{\sqrt{x^2 - a^2}}$$

# 20	Antwort	# 19	Antwort	# 18	Antwort	# 17	Antwort
	$\arcsin\left(\frac{x}{a}\right)$		$-\frac{1}{a}\operatorname{Arcoth}\left(\frac{x}{a}\right)$		$\frac{1}{a}\operatorname{Artanh}\left(\frac{x}{a}\right)$		$\frac{1}{a}\arctan\left(\frac{x}{a}\right)$
	$=\frac{1}{2a}\ln\left \frac{x-a}{x+a}\right $		$=\frac{1}{2a}\ln\left \frac{a+x}{a-x}\right $		$=\frac{1}{2a}\ln\left \frac{a+x}{a-x}\right $		
	$(x < a, a > 0)$		$(x > a, a > 0)$		$(x < a, a > 0)$		
				# 22	Antwort	# 21	Antwort
					$\operatorname{Arcosh}\left(\frac{x}{a}\right)$		$\operatorname{Arsinh}\left(\frac{x}{a}\right)$
					$=\ln\left x+\sqrt{x^2-a^2}\right $		$=\ln\left x+\sqrt{x^2+a^2}\right $
					$(x > a, a > 0)$		$(a > 0)$