

An2                  # 1        Integral

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$$\int x^n dx$$

An2                  # 2        Integral

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

An2                  # 3        Integral

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$$\int e^x dx$$

An2                  # 4        Integral

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$$\int a^x dx$$

An2                  # 5        Integral

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$$\int \sin(x) dx$$

An2                  # 6        Integral

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$$\int \cos(x) dx$$

An2                  # 7        Integral

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$$\int \tan(x) dx$$

An2                  # 8        Integral

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$$\int \cot(x) dx$$

An2                  # 9        Integral

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

An2                  # 10        Integral

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

An2                  # 11        Integral

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$$\int \sinh(x) dx$$

An2                  # 12        Integral

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$$\int \cosh(x) dx$$

An2                  # 13        Integral

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$$\int \tanh(x) dx$$

An2                  # 14        Integral

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$$\int \coth(x) dx$$

An2                  # 15        Integral

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

An2                  # 16        Integral

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

# 4	Antwort
	$\frac{a^x}{\ln(a)}$

# 3	Antwort
	$e^x$

# 2	Antwort
	$\ln x $

# 1	Antwort
	$\frac{x^{n+1}}{n+1}$

# 8	Antwort
	$\ln \sin(x) $

# 7	Antwort
	$-\ln \cos(x) $

# 6	Antwort
	$\sin(x)$

# 5	Antwort
	$-\cos(x)$

# 12	Antwort
	$\sinh(x)$

# 11	Antwort
	$\cosh(x)$

# 10	Antwort
	$-\cot(x)$

# 9	Antwort
	$\tan(x)$

# 16	Antwort
	$-\coth(x)$

# 15	Antwort
	$\tanh(x)$

# 14	Antwort
	$\ln \sinh(x) $

# 13	Antwort
	$\ln \cosh(x) $

An2            # 17    Integral

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

An2            # 18    Integral

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

An2            # 19    Integral

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

An2            # 20    Integral

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

An2            # 21    Integral

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

An2            # 22    Integral

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

# 20      Antwort

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$$\arcsin\left(\frac{x}{a}\right)$$
$$(|x| < a, a > 0)$$

# 19      Antwort

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$$-\frac{1}{a}\operatorname{Arcoth}\left(\frac{x}{a}\right)$$
$$= \frac{1}{2a}\ln\left|\frac{x-a}{x+a}\right|$$
$$(|x| > a, a > 0)$$

# 18      Antwort

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$$\frac{1}{a}\operatorname{Artanh}\left(\frac{x}{a}\right)$$
$$= \frac{1}{2a}\ln\left|\frac{a+x}{a-x}\right|$$
$$(|x| < a, a > 0)$$

# 17      Antwort

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$$\frac{1}{a}\arctan\left(\frac{x}{a}\right)$$

# 22      Antwort

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$$\operatorname{Arcosh}\left(\frac{x}{a}\right)$$
$$= \ln\left|x + \sqrt{x^2 - a^2}\right|$$
$$(|x| > a, a > 0)$$

# 21      Antwort

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$$\operatorname{Arsinh}\left(\frac{x}{a}\right)$$
$$= \ln\left|x + \sqrt{x^2 + a^2}\right|$$
$$(a > 0)$$