>

> $Int\left(\frac{1}{3\cdot x}, x\right) = int\left(\frac{1}{3\cdot x}, x\right);$

$$\int \frac{1}{3\,x}\,dx = \frac{1}{3}\ln(x) \tag{1}$$

> $Int\left(\frac{1}{(9\cdot x-5)}, x\right) = int\left(\frac{1}{(9\cdot x-5)}, x\right);$

$$\int \frac{1}{9\,x-5}\,dx = \frac{1}{9}\ln(9\,x-5) \tag{2}$$

> $Int\left(\frac{1}{(6\cdot x-11)^5}, x\right) = int\left(\frac{1}{(6\cdot x-11)^5}, x\right);$

$$\int \frac{1}{(6\,x-11)^5}\,dx = -\frac{1}{24\,(6\,x-11)^4} \tag{3}$$

> $Int(x^3+x+6, x) = int(x^3+x+6, x);$

$$\int (x^3+x+6)\,dx = \frac{1}{4}\,x^4+\frac{1}{2}\,x^2+6\,x \tag{4}$$

> $Int(x^3+x+6, x=1..3) = int(x^3+x+6, x=1..3);$

$$\int_1^3 (x^3+x+6)\,dx = 36 \tag{5}$$

> $Int\left(\frac{1}{sqrt(x)}+3\cdot sqrt(x), x\right) = int\left(\frac{1}{sqrt(x)}+3\cdot sqrt(x), x\right);$

$$\int \left(\frac{1}{\sqrt{x}}+3\sqrt{x}\right)dx = 2\sqrt{x}\,(x+1) \tag{6}$$

> $Int\left(\frac{1}{sqrt(x)}+3\cdot sqrt(x), x=1..4\right) = int\left(\frac{1}{sqrt(x)}+3\cdot sqrt(x), x=1..4\right);$

$$\int_1^4 \left(\frac{1}{\sqrt{x}}+3\sqrt{x}\right)dx = 16 \tag{7}$$

> $Int(4\cdot exp(-x), x) = int(4\cdot exp(-x), x);$

$$\int 4\,e^{-x}\,dx = -4\,e^{-x} \tag{8}$$

> $Int(4\cdot exp(-x), x=0..1) = int(4\cdot exp(-x), x=0..1);$

$$\int_0^1 4\,e^{-x}\,dx = 4-4\,e^{-1} \tag{9}$$

> $Int(4\cdot exp(-x), x=0..1) = evalf(4-4\,e^{-1});$

$$\int_0^1 4\,e^{-x}\,dx = 2.528482235 \tag{10}$$

> $Int(8\cdot x\cdot(2\cdot x^2+3), x) = int(8\cdot x\cdot(2\cdot x^2+3), x);$

(11)

$$\int 8\,x\,(2\,x^2+3)\,dx = 4\,x^4+12\,x^2 \quad (11)$$

> $Int(8\cdot x\cdot (2\cdot x^2+3),\, x=0..3) = int(8\cdot x\cdot (2\cdot x^2+3),\, x=0..3);$

$$\int_0^3 8\,x\,(2\,x^2+3)\,dx = 432 \quad (12)$$

> $Int(x^2\cdot (x^3-5)^2,\, x) = int(x^2\cdot (x^3-5)^2,\, x);$

$$\int x^2\,(x^3-5)^2\,dx = \frac{1}{9}\,x^9-\frac{5}{3}\,x^6+\frac{25}{3}\,x^3 \quad (13)$$

> $Int\left(\frac{3\cdot x^2}{(x^3+1)^2},\, x\right) = int\left(\frac{3\cdot x^2}{(x^3+1)^2},\, x\right);$
> $Int\left(\frac{3\cdot x^2}{(x^3+1)^2},\, x=0..2\right) = int\left(\frac{3\cdot x^2}{(x^3+1)^2},\, x=0..2\right);$

$$\int \frac{3\,x^2}{(x^3+1)^2}\,dx = -\frac{1}{x^3+1}$$

$$\int_0^2 \frac{3\,x^2}{(x^3+1)^2}\,dx = \frac{8}{9} \quad (14)$$

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$Int\left(\frac{6\cdot x}{(x^2+1)},\, x\right) = int\left(\frac{6\cdot x}{(x^2+1)},\, x\right);$
$Int\left(\frac{6\cdot x}{(x^2+1)},\, x=0..3\right) = int\left(\frac{6\cdot x}{(x^2+1)},\, x=0..3\right);$

$$\int \frac{6\,x}{x^2+1}\,dx = 3\ln(x^2+1)$$

$$\int_0^3 \frac{6\,x}{x^2+1}\,dx = 3\ln(2)+3\ln(5) \quad (15)$$

> $Int(4\cdot x\cdot e^{(x^2+2)},\, x) = int(4\cdot x\cdot e^{(x^2+2)},\, x);$

$$\int 4\,x\,e^{x^2+2}\,dx = \frac{2\,e^{x^2+2}}{\ln(e)} \quad (16)$$

> $Int(4\cdot x\cdot e^{(x^2+2)},\, x=1..2) = int(4\cdot x\cdot e^{(x^2+2)},\, x=1..2);$

$$\int_1^2 4\,x\,e^{x^2+2}\,dx = \frac{2\,e^3\,(-1+e^3)}{\ln(e)} \quad (17)$$

> $Int(x\cdot abs(x),\, x) = int(x\cdot abs(x),\, x);$

(18)

$$\int x\,|x|\,dx = \begin{cases} -\frac{1}{3}x^3 & x \le 0 \\ \frac{1}{3}x^3 & 0 < x \end{cases} \tag{18}$$

> $Int(x\cdot abs(x),\ x=-2..1) = int(x\cdot abs(x),\ x=-2..1);$

$$\int_{-2}^{1} x\,|x|\,dx = -\frac{7}{3} \tag{19}$$

> $Int\left(\frac{1}{(2\cdot x-3)^5},\ x\right) = int\left(\frac{1}{(2\cdot x-3)^5},\ x\right);$

$$\int \frac{1}{(2x-3)^5}\,dx = -\frac{1}{8\,(2x-3)^4} \tag{20}$$

> $Int\left(\frac{1}{(2\cdot x-3)^5},\ x=0..1\right) = int\left(\frac{1}{(2\cdot x-3)^5},\ x=0..1\right);$

$$\int_0^1 \frac{1}{(2x-3)^5}\,dx = -\frac{10}{81} \tag{21}$$

> $Int\left(\frac{1}{4-3\cdot t},\ t\right) = int\left(\frac{1}{4-3\cdot t},\ t\right);$

$$\int \frac{1}{4-3t}\,dt = -\frac{1}{3}\ln(4-3t) \tag{22}$$

> $Int\left(\frac{1}{4-3\cdot t},\ t=-1..0\right) = int\left(\frac{1}{4-3\cdot t},\ t=-1..0\right);$

$$\int_{-1}^{0} \frac{1}{4-3t}\,dt = \frac{1}{3}\ln(7) - \frac{2}{3}\ln(2) \tag{23}$$

> $Int\left(\frac{1}{sqrt(4\cdot x^2-4\cdot x+1)},\ x\right) = int\left(\frac{1}{sqrt(4\cdot x^2-4\cdot x+1)},\ x\right);$

$$\int \frac{1}{\sqrt{(-1+2x)^2}}\,dx = \frac{1}{2}\,\frac{(-1+2x)\ln(-1+2x)}{\sqrt{(-1+2x)^2}} \tag{24}$$

> $Int\left(\frac{1}{sqrt(4\cdot x^2-4\cdot x+1)},\ x=1..2\right) = int\left(\frac{1}{sqrt(4\cdot x^2-4\cdot x+1)},\ x=1..2\right);$

$$\int_1^2 \frac{1}{\sqrt{(-1+2x)^2}}\,dx = \frac{1}{2}\ln(3) \tag{25}$$

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> $Int\left(\frac{(x^2-5\cdot x+6)}{x-3},\ x\right) = int\left(\frac{(x^2-5\cdot x+6)}{x-3},\ x\right);$

(26)

$$\int \frac{x^2-5x+6}{x-3}\,dx = \frac{1}{2}x^2-2x \qquad (26)$$

> $Int\left(\frac{(x^2-5\cdot x+6)}{x-3}, x=0..1\right) = int\left(\frac{(x^2-5\cdot x+6)}{x-3}, x=0..1\right);$

$$\int_0^1 \frac{x^2-5x+6}{x-3}\,dx = -\frac{3}{2} \qquad (27)$$

> $Iint\left(\frac{1}{sqrt(x^3+3\cdot x^2+3\cdot x+1)}, x\right) = int\left(\frac{1}{sqrt(x^3+3\cdot x^2+3\cdot x+1)}, x\right);$

$$Iint\left(\frac{1}{\sqrt{x^3+3x^2+3x+1}}, x\right) = -\frac{2(x+1)}{\sqrt{x^3+3x^2+3x+1}} \qquad (28)$$

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> $Int\left(\frac{1}{sqrt(x^3+3\cdot x^2+3\cdot x+1)}, x=1..2\right) = int\left(\frac{1}{sqrt(x^3+3\cdot x^2+3\cdot x+1)}, x=1..2\right);$

$$\int_1^2 \frac{1}{\sqrt{x^3+3x^2+3x+1}}\,dx = \sqrt{2}-\frac{2}{3}\sqrt{3} \qquad (29)$$

> $Int(ln(x), x) = int(ln(x), x);$

$$\int \ln(x)\,dx = x\ln(x)-x \qquad (30)$$

> $Int(ln(x), x=1..2) = int(ln(x), x=1..2);$

$$\int_1^2 \ln(x)\,dx = 2\ln(2)-1 \qquad (31)$$

> $Int(ln(x)^2, x) = int(ln(x)^2, x);$

$$\int \ln(x)^2\,dx = \ln(x)^2 x-2x\ln(x)+2x \qquad (32)$$

> $Int(ln(x)^2, x=1..2) = int(ln(x)^2, x=1..2);$

$$\int_1^2 \ln(x)^2\,dx = 2+2\ln(2)^2-4\ln(2) \qquad (33)$$

> $Int(x\cdot ln(x), x) = int(x\cdot ln(x), x);$

$$\int x\ln(x)\,dx = \frac{1}{2}x^2\ln(x)-\frac{1}{4}x^2 \qquad (34)$$

> $Int(x\cdot ln(x), x=1..2) = int(x\cdot ln(x), x=1..2);$

$$\int_1^2 x\ln(x)\,dx = -\frac{3}{4}+2\ln(2) \qquad (35)$$

> $Int(x\cdot exp(x), x) = int(x\cdot exp(x), x);$

(36)

$$\int x\,e^{x}\,dx = (-1 + x)\,e^{x} \tag{36}$$

> $Int(x\cdot exp(x), x=0..1) = int(x\cdot exp(x), x=0..1);$

$$\int_0^1 x\,e^{x}\,dx = 1 \tag{37}$$

> $Int(x^2\cdot exp(x), x) = int(x^2\cdot exp(x), x);$

$$\int x^2\,e^{x}\,dx = (2-2\,x+x^2)\,e^{x} \tag{38}$$

> $Int(x^2\cdot exp(x), x=0..1) = int(x^2\cdot exp(x), x=0..1);$

$$\int_0^1 x^2\,e^{x}\,dx = -2 + e \tag{39}$$

> $Int((3\cdot x^2+4)\cdot exp(2\cdot x), x) = int((3\cdot x^2+4)\cdot exp(2\cdot x), x);$

$$\int (3\,x^2+4)\,e^{2\,x}\,dx = \frac{1}{4}\,(11-6\,x+6\,x^2)\,e^{2\,x} \tag{40}$$

> $Int((3\cdot x^2+4)\cdot exp(2\cdot x), x=0..1) = int((3\cdot x^2+4)\cdot exp(2\cdot x), x=0..1);$

$$\int_0^1 (3\,x^2+4)\,e^{2\,x}\,dx = -\frac{11}{4} + \frac{11}{4}\,e^2 \tag{41}$$

> $Int\left(\frac{3\cdot x}{(x+1)^2}, x\right) = int\left(\frac{3\cdot x}{(x+1)^2}, x\right);$

$$\int \frac{3\,x}{(x+1)^2}\,dx = \frac{3}{x+1} + 3\ln(x+1) \tag{42}$$

> $Int\left(\frac{3\cdot x}{(x+1)^2}, x=0..1\right) = int\left(\frac{3\cdot x}{(x+1)^2}, x=0..1\right);$

$$\int_0^1 \frac{3\,x}{(x+1)^2}\,dx = -\frac{3}{2} + 3\ln(2) \tag{43}$$

> $Int(16\cdot x\cdot exp(-(x+9)), x) = int(16\cdot x\cdot exp(-(x+9)), x);$

$$\int 16\,x\,e^{-x-9}\,dx = -16\,(x+1)\,e^{-x-9} \tag{44}$$

> $Int(16\cdot x\cdot exp(-(x+9)), x=1..2) = int(16\cdot x\cdot exp(-(x+9)), x=1..2);$

$$\int_1^2 16\,x\,e^{-x-9}\,dx = 32\,e^{-10} - 48\,e^{-11} \tag{45}$$

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