$$\frac{x+b}{\left(x^2+2bx+c\right)^n}$$

$$\int^x \frac{()+b}{()^2+2b\,()+c} = {}^{x^2+2bx+c}\not{x}$$

$$\int^x \frac{()+b}{\left(()^2+2b\,()+c\right)^n} = \frac{-1}{(n-1)\left(x^2+2bx+c\right)^{n-1}}$$

$$\frac{1}{\left(x^2+2bx+c\right)^n}$$

$$\int \left(x^2+2bx+c\right)^{-n} = \int \left((x+b)^2+\left(c-b^2\right)\right)^{-n} \underset{t=\frac{x+b}{\sqrt{c-b^2}}}{=} \left(c-b^2\right)^{1/2-n} \int_{dt} \left(t^2+1\right)^{-n}$$

$$\begin{cases} \int_{dx} \left(x^2+bx+c\right)^{-1} = \frac{1}{\sqrt{c-b^2}} \int_{dt} \frac{1}{t^2+1} = \frac{1}{\sqrt{c-b^2}}{}^{t}\not{x} = \frac{1}{\sqrt{c-b^2}} \overset{-1}{\tan} \frac{x+b}{\sqrt{c-b^2}} \\ \int_{dx} \left(x^2+2bx+c\right)^{-n} = \left(c-b^2\right)^{1/2-n} \int_{dt} \left(t^2+1\right)^{-n} \end{cases}$$

$$\int^x \left(()^2+1\right)^{-n} = \frac{\left(x^2+1\right)^{1-n} x}{2n-2} + \frac{2n-3}{2n-2} \int^x \left(()^2+1\right)^{1-n}$$

$$\int^x \frac{1}{1+()^2} = {}^{x}\not{x}: \quad \int^x \frac{2}{()^2+4} = {}^{x/2}\not{x}: \quad \int^x \frac{3}{()^2+9} = {}^{x/3}\not{x}: \quad \int^x \frac{\sqrt{7}}{()^2+7} = {}^{x/\sqrt{7}}\not{x}: \quad \int^x \frac{\sqrt{15}}{3()^2+5} = {}^{x\sqrt{3/5}}\not{x}$$

$$\int^x \frac{1}{()^2-2\,()+2} = {}^{x-1}\not{x}$$

$$\int^x \frac{1}{()^2+()+1} = \frac{2}{\sqrt{3}}\,{}^{(2x+1)/\sqrt{3}}\not{x}$$

$$\int^x \frac{()}{()^4+2} = \frac{\sqrt{2}}{4}\,{}^{x^2/\sqrt{2}}\not{x}$$

$$\int^x \frac{1}{()^4+()^2+1} = \frac{7}{\sqrt{3}}\,{}^{(2x^2+1)/\sqrt{3}}\not{x}$$

$$\int^{x} \frac{3()^{2}+()+1}{()^{2}-2\,()+3} = 3x + \frac{7}{2}\,{}^{x^2-2x+3}\not{x} - \frac{\sqrt{2}}{2}\,{}^{\frac{x-1}{\sqrt{2}}}\not{x}$$

$$\int^{x} \frac{3\,()+4}{()^{2}-4\,()+5} = \frac{3}{2}\,{}^{x^2-4x+5}\not{x} + 10^{\,x-2}\not{x}$$

$$\int^{x} \frac{18}{\left(()^{2}+3\right)^{2}} = \frac{3x}{x^2+3} + \sqrt{3}^{\,x/\sqrt{3}}\not{x}$$

$$\int^{x} \frac{36}{\left(()^{2}+4\,()+13\right)^{3}} = \frac{x+2}{\left(x^2+4x+13\right)^{2}} + \frac{1}{6}\frac{x+2}{x^2+4x+13} + \frac{1}{18}\,{}^{(x+2)\,/3}\not{x}$$

$$\int^{x} \frac{52}{\left(()^{2}+13\right)^{3}} = \frac{x}{\left(x^2+13\right)^{2}} + \frac{3}{26}\frac{x}{x^2+13} + \frac{3\sqrt{13}}{338}\,{}^{x/\sqrt{13}}\not{x}$$

$$\int^{x} \frac{2\,()+7}{()^{2}-4\,()+13} = {}^{x^2-4x+13}\not{x} + \frac{11}{3}\,{}^{(x-2)\,/3}\not{x}$$

$$\int^{x} \frac{1}{()^{2}-6\,()+9} = \frac{1}{2}\,{}^{x^2-5x+36}\not{x} + \frac{19}{\sqrt{119}}\,{}^{(2x-5)\,/\sqrt{119}}\not{x}$$

$$\int^{x} \frac{2\,()+3}{\left(()^{2}+()+1\right)^{2}} = \frac{1}{3}\frac{4x-1}{x^2+x+1} + \frac{8\sqrt{3}}{9}\,{}^{(2x+1)\,/\sqrt{3}}\not{x}$$

$$\int^{x} \frac{2\,()+1}{\left(()^{2}-()+1\right)^{3}} = \frac{1}{6}\frac{4x-5}{\left(x^2-x+1\right)^{2}} + \frac{2}{3}\frac{2x-1}{x^2-x+1} + \frac{8\sqrt{3}}{9}\,{}^{(2x-1)\,/\sqrt{3}}\not{x}$$

$$\int^{x} \frac{5\,()+7}{()^{2}-5\,()+36} = \frac{5}{2}\,{}^{x^2-5x+36}\not{x} + \frac{39}{\sqrt{119}}\,{}^{(2x-5)\,/\sqrt{119}}\not{x}$$

$$\int^{x} \frac{7\,()+5}{\left(()^{2}+()+1\right)^{2}} = \frac{x-3}{x^2+x+1} + \frac{2}{\sqrt{3}}\,{}^{\sqrt{3}\,(2x+1)}\not{x}$$

$$\int^x \frac{8()^2+5()+7}{\left(()^2+4()+13\right)^2} = -\frac{1}{18}\frac{43x-157}{x^2+4x+13}+\frac{101}{54}{}^{(x+2)/2}\not{x}$$

$$\int^x \frac{()^2+2()+7}{()^3-1} = \frac{10}{3}{}^{x-1}\not{c} - \frac{7}{6}{}^{x^2+x+1}\not{c} - \frac{5}{\sqrt{3}}{}^{(2x+1)/\sqrt{3}}\not{x}$$

$$\int^x \frac{3()^2+5()+1}{()^3+1} = -\frac{1}{3}{}^{x+1}\not{c} + \frac{5}{3}{}^{x^2-x+1}\not{c} - 2\sqrt{3}{}^{(2x-1)/\sqrt{3}}\not{x}$$

$$\int^x \frac{1}{\left(()^2+1\right)^2(()-1)} = \frac{1}{4}{}^{x-1}\not{c} - \frac{1}{8}{}^{x^2+1}\not{c} - \frac{1}{2}{}^{x}\not{x} - \frac{1}{4}\frac{x-1}{x^2+1}$$

$$\int^x \frac{()^4-()^2}{()^2+1} = \frac{1}{3}x^3-2x+2{}^{x}\not{x}$$

$$\int^x \frac{()^4+()^2+1}{\left(()^2+4\right)^2} = x+\frac{13}{8}\frac{x}{x^2+4}-\frac{43}{16}{}^{x/2}\not{x}$$

$$\int^x \frac{5()^2+1}{\left(()^2+1\right)\left(()^2+5\right)} = -{}^{x}\not{x}+\frac{6}{\sqrt{5}}{}^{x/\sqrt{5}}\not{x}$$

$$\int^x \frac{()^4+1}{()^4-1} = x+\frac{1}{2}{}^{\frac{x-1}{x+1}}\not{c} - {}^{x}\not{x}$$

$$\int^x \frac{()^4-1}{()^4+1} = x-\frac{\sqrt{2}}{4}{}^{\frac{x^2+\sqrt{2}x+1}{x^2-\sqrt{2}x+1}}\not{c} - \frac{1}{\sqrt{2}}{}^{\sqrt{2}x+1}\not{x} - \frac{1}{\sqrt{2}}{}^{\sqrt{2}x-1}\not{x}$$

$$\int^x \frac{()^5+4()+1}{(()-1)^3\left(()^2+()+1\right)} = x-(x-1)^{-2}-(x-1)^{-1}+\frac{5}{3}{}^{x-1}\not{c}+\frac{1}{6}{}^{x^2+x+1}\not{c}+\frac{1}{\sqrt{3}}{}^{(2x+1)/\sqrt{3}}\not{x}$$

$$\int^x \frac{()+1}{()^5-()^4+()^3} = -\frac{1}{2}x^{-2}-2x^{-1}+{}^{x}\not{c}-\frac{1}{2}{}^{x^2-x+1}\not{c}-\sqrt{3}{}^{(2x-1)/\sqrt{3}}\not{x}$$

$$\int^x \frac{32}{()^4+16} = \frac{1}{\sqrt{2}}{}^{\frac{x^2+2\sqrt{2}x+4}{x^2-2\sqrt{2}x+4}}\not{c}+\sqrt{2}{}^{1+x/\sqrt{2}}\not{x}+\sqrt{2}{}^{-1+x/\sqrt{2}}\not{x}$$

$$\int^{x} \frac{3()^3 - 2()^2 + () - 1}{(() - 4)^4} = -x^{-1} - {}^{x}\not{x}$$

$$\int^{x} \frac{()^3 - 1}{()^4 - 5()^3 + 6()^2} = \frac{13}{18}{}^{x-1}\not{x} - \frac{3}{2}{}^{x+1}\not{x} + \frac{7}{18}{}^{x^2+x+1}\not{x} + \frac{\sqrt{3}}{9}{}^{(2x+1)/\sqrt{3}}\not{x} + \frac{2}{3}\frac{3x+2}{x^2+x+1}$$

$$\int^{x} \frac{7()^2 + 5\,() + 1}{\left(()^2 - 1\right)\left(()^2 + () + 1\right)^2} = -\frac{5}{6}{}^{x^2+2}\not{x} - \frac{5\sqrt{2}}{6}{}^{x/\sqrt{2}}\not{x} + \frac{5}{6}{}^{x^2+x+1}\not{x} + \frac{7}{\sqrt{3}}{}^{(2x+1)/\sqrt{3}}\not{x}$$

$$\int^{x} \frac{()^2 + 7}{\left(()^2 + 2\right)\left(()^2 + () + 1\right)} = \frac{1}{4}{}^{x^2+x+1}\not{x} + \frac{\sqrt{3}}{6}{}^{(2x+1)/\sqrt{3}}\not{x} - \frac{1}{4}{}^{x^2-x+1}\not{x} + \frac{\sqrt{3}}{6}{}^{(2x-1)/\sqrt{3}}\not{x}$$

$$\int^{x} \frac{7\,()}{()^4 + ()^2 + 1} = -{}^{2(x^2-4)^{-1/2}}\not{x} + {}^{x+\sqrt{x^2-4}}\not{x}$$

$$\int^{x} \frac{()^6 + 7()^2 + 8}{()^5 - 4()^3 + ()^2 - 4} = \frac{1}{2}x^2 - \frac{38\sqrt{3}}{63}{}^{(2x-1)/\sqrt{3}}\not{x} - \frac{2}{7}{}^{x^2-x+1}\not{x} + \frac{25}{9}{}^{x-2}\not{x} + \frac{25}{7}{}^{x+2}\not{x} - \frac{16}{9}{}^{x+1}\not{x}$$

$$\int_{dx}^{-\infty|\infty} {}^{x}\lceil 1{:}0{:}1 \rceil^{-2} \underset{x={}^{u}\mathfrak{t}}{=} \int_{du/{}^{u}\mathfrak{c}^2}^{-\frac{\pi}{2}|\frac{\pi}{2}} {}^{u}\mathfrak{c}^4 = \int_{du}^{-\frac{\pi}{2}|\frac{\pi}{2}} {}^{u}\mathfrak{c}^2 = \int_{du}^{-\frac{\pi}{2}|\frac{\pi}{2}} \frac{1 + {}^{2u}\mathfrak{c}}{2} = \frac{\pi}{2}$$

$$\int_{dx}^{-\infty|0} \frac{1}{x^2+4}\colon \quad \int_{dx}^{0|5} \frac{1}{x^2-4x-5} = \infty\colon \quad \int_{dx}^{2|3} \frac{1}{x^2-2x-3}\colon \quad \int_{dx}^{-1|\infty} \frac{1}{x^2+4x+5}$$