

(aaa)

$$\int \frac{dx}{\sqrt[3]{(4-3x)^2}}$$

$$-(4-3x)^{\frac{1}{3}} + C$$

(aab)

$$\int e^{-x} \sin^2 x dx$$

$$-\frac{1}{5}e^{-x} (5 \sin^2 x + 2 \cos 2x + \sin 2x) + C$$

(aac)

$$\int e^{ax} \cos bx dx$$

$$\frac{e^{ax}}{a^2+b^2} (a \cos bx + b \sin bx) + C$$

(aad)

$$\int (3x^2 + 2x + 1) \sin \frac{x}{3} dx$$

$$-(9x^2 + 6x - 15) \cos \frac{x}{3} + (18x + 6) \sin \frac{x}{3} + C$$

(aae)

$$\int \sin x \sqrt{(3 + 2 \cos x)^5} dx$$

$$-\frac{1}{7}(3 + 2 \cos x)^{\frac{7}{2}} + C$$

(aaf)

$$\int (3x^2 + 1) \ln(x - 4) dx$$

$$x(x^2 + 1) \ln(x - 4) - \frac{1}{3}x^3 + 2x^2 + 17x + 68 \ln|x - 4| + C$$

(aag)

$$\int \left(\frac{\ln x}{x}\right)^2 dx$$

$$-\frac{1}{x}(\ln^2 x - 2 \ln x - 2) + C$$

(aah)

$$\int x^2 \operatorname{arctg} 3x dx$$

$$\frac{1}{3}x^3 \operatorname{arctg} 3x - \frac{1}{18}x^2 + \frac{1}{162} \ln(1 + 9x^2) + C$$

(aai)

$$\int \arcsin^2 x dx$$

$$x \arcsin^2 x + 2\sqrt{1-x^2} \arcsin x - 2x + C$$

(aaj)

$$\int \sin x \sinh x dx$$

$$\frac{1}{2}(\sin x \cosh x - \cos x \sinh x) + C$$

(aak)

$$\int (4x^3 + 2x) \operatorname{arctg} x dx$$

$$(x^4 + x^2) \operatorname{arctg} x - \frac{1}{3}x^3 + C$$

(aal)

$$\int \frac{dx}{(2x^2+2)\sqrt{\operatorname{arccotg}^3 x}}$$

$$\frac{1}{\sqrt{\operatorname{arccotg} x}} + C$$

(aam)

$$\int (2x - 1) \arccos x dx$$

$$\operatorname{arctg} \sqrt{\frac{x-1}{x+1}} + \frac{1}{2}(x^2 - x - 2)\sqrt{\frac{x-1}{x+1}} + C$$

(aan)

$$\int (x^2 - 3x + 1) \cosh 2x dx$$

$$\frac{1}{2}(x^2 - 3x + 1) \sinh 2x - \frac{1}{4}(2x - 3) \cosh 2x + \frac{1}{4} \sinh 2x + C$$

(aao)

$$\int \frac{\sqrt{x}}{1+\sqrt{x}} dx$$

$$x - 2\sqrt{x} + 2 \ln|\sqrt{x} + 1| + C$$

(aap)

$$\int \frac{dx}{(2-x)\sqrt{1-x}}$$

$$-2 \operatorname{arctg} \sqrt{x-1} + C$$

(aaq)

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

(aar)

$$2\sqrt{x} - 2\sqrt{2} \operatorname{arctg} \sqrt{\frac{x}{2}} + C$$

$$\int \frac{dx}{1+\sqrt[3]{x}}$$

(aas)

$$\frac{3}{2} \sqrt[3]{x^2} - 3\sqrt[3]{x} + 3 \ln |1 + \sqrt[3]{x}| + C$$

$$\int \frac{\sqrt{x}}{1-\sqrt[3]{x}} dx$$

(aat)

$$\frac{1}{7} x^{\frac{7}{6}} + \frac{1}{5} x^{\frac{5}{6}} + \frac{1}{3} x^{\frac{1}{2}} + x^{\frac{1}{6}} + \ln \left| \frac{x^{\frac{1}{6}} - 1}{x^{\frac{1}{6}} + 1} \right| + C$$

$$\int \frac{dx}{x\sqrt{x-4}}$$

(aaU)

$$\operatorname{arctg} \frac{\sqrt{x-4}}{2} + C$$

$$\int \sqrt{\frac{1+x}{1-x}} dx$$

(aav)

$$2 \operatorname{arctg} \sqrt{\frac{1+x}{1-x}} - \sqrt{1-x^2} + C$$

$$\int \sqrt{\frac{1+x}{1-x}} \frac{1}{(1-x)(1+x)^2} dx$$

(aaw)

$$-\frac{1}{2} \sqrt{\frac{1-x}{1+x}} + \sqrt{\frac{1+x}{1-x}} + \frac{1}{6} \left(\frac{1+x}{1-x} \right)^{\frac{3}{2}} + C$$

$$\int \frac{dx}{\sqrt{(x-2)^3(x-3)}}$$

(aax)

$$2\sqrt{\frac{x-3}{x-2}} + C$$

$$\int \frac{dx}{\sqrt{3-2x-5x^2}}$$

(aay)

$$-\frac{2}{\sqrt{5}} \operatorname{arctg} \sqrt{\frac{3-5x}{5+5x}} + C$$

$$\int \frac{x-1}{\sqrt{x^2-2x+2}} dx$$

(aaz)

$$\sqrt{x^2-2x+2} + C$$

$$\int \frac{dx}{(9+x^2)\sqrt{9+x^2}}$$

(aba)

$$\frac{1}{9} \frac{x}{\sqrt{9+x^2}} + C$$

$$\int \sqrt{3-2x-x^2} dx$$

(abb)

$$-4 \operatorname{arctg} \sqrt{\frac{1-x}{x+3}} - \frac{x+1}{2} \sqrt{3-2x-x^2} + C$$

$$\int \frac{2x+1}{\sqrt{x^2+x}} dx$$

(abc)

$$2\sqrt{x^2+x} + C$$

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

(abd)

$$\ln |x+1+\sqrt{x^2+2x}| + \sqrt{x^2+2x} + C$$

$$\int \frac{dx}{\sqrt{25+9x^2}}$$

(abe)

$$\frac{1}{6} \ln \left| \frac{\sqrt{25+9x^2}+3x}{\sqrt{25+9x^2}-3x} \right| + C$$

$$\int \frac{3 dx}{\sqrt{9x^2-1}}$$

(abf)

$$\arccos \frac{1}{3x} + C$$

$$\int \frac{dx}{x^2\sqrt{9-x^2}}$$

$$-\frac{1}{9} \frac{\sqrt{9-x^2}}{x} + C$$

(abg)

$$\int \sin^3 x \cos x \, dx$$

$$\frac{1}{4} \sin^4 x + C$$

(abh)

$$\int \cos^5 2x \sin 2x \, dx$$

$$-\frac{1}{12} \cos^6 2x + C$$

(abi)

$$\int \operatorname{tg} 4x \, dx$$

$$-\frac{1}{4} \ln |\cos 4x| + C$$

(abj)

$$\int \cos^2 2x \, dx$$

$$\frac{1}{8} \sin 4x + \frac{1}{2} x + C$$

(abk)

$$\int \cos^5 x \, dx$$

$$\sin x - \frac{2}{3} \sin^3 x + \frac{1}{5} \sin^5 x + C$$

(abl)

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

$$\frac{1}{2} \ln \left| \frac{1-\cos x}{1+\cos x} \right| + C$$

(abm)

$$\int \frac{\sin^3 x}{\cos^4 x} dx$$

$$\frac{1}{3 \cos^3 x} - \frac{1}{\cos x} + C$$

(abn)

$$\int \frac{dx}{\sin x \cos^3 x}$$

$$\ln |\operatorname{tg} x| + \frac{1}{2} \operatorname{tg}^2 x + C$$

(abo)

$$\int \operatorname{cotg}^3 x \, dx$$

$$-\frac{1}{2} \operatorname{cotg}^2 x - \ln |\sin x| + C$$

(abp)

$$\int \frac{\sin x - \cos x}{\sin x + \cos x} dx$$

$$-\ln |\sin x + \cos x| + C$$

(abq)

$$\int \frac{dx}{5-3 \cos x}$$

$$\frac{1}{2} \operatorname{arctg}(2 \operatorname{tg} \frac{x}{2}) + C$$

(abr)

$$\int \frac{\cos x}{1+\cos x} dx$$

$$x - \frac{\sin x}{1+\cos x} + C$$

(abs)

$$\int \frac{\sin x}{1-\sin x} dx$$

$$-x + \frac{1+\sin x}{\cos x} + C$$

(abt)

$$\int \frac{dx}{\sin x + \cos x}$$

$$\frac{\sqrt{2}}{2} \ln \left| \frac{1+\sqrt{2} \sin x}{\sqrt{2}+1+(2+\sqrt{2}) \cos x} \right| + C$$

(abu)

$$\int \frac{dx}{\cos x + 2 \sin x + 3}$$

$$\operatorname{arctg}(1 + \operatorname{tg} \frac{x}{2}) + C$$

(abv)

$$\int \sin 3x \sin 5x \, dx$$

$$\frac{1}{4} \sin 2x - \frac{1}{16} \sin 8x + C$$

(abw)

$$\int \sin \frac{x}{4} \cos \frac{3x}{4} \, dx$$

$$-\frac{1}{2} \cos x + \cos \frac{x}{2} + C$$

(abx)

$$\int \sin x \sin 2x \sin 3x \, dx$$

(aby)

$$-\frac{1}{8} \cos 2x + \frac{1}{24} \cos 6x - \frac{1}{16} \cos 4x + C$$

$$\int \cosh^3 x \, dx$$

(abz)

$$\frac{2}{3} \sinh x - \frac{1}{3} \cosh^2 x \sinh x + C$$

$$\int \operatorname{tgh} x \, dx$$

(aca)

$$\ln \cosh x + C$$

$$\int \frac{x^2 - 5x + 9}{x^2 - 5x + 6} \, dx$$

(acb)

$$x + 3 \ln \left| \frac{x-3}{x-2} \right| + C$$

$$\int \frac{5x^3 + 2}{x^3 - 5x^2 + 4x} \, dx$$

(acc)

$$5x + \frac{1}{2} \ln |x| - \frac{7}{3} \ln |x-1| + \frac{161}{6} \ln |x-4| + C$$

$$\int \frac{x^2 \, dx}{x^2 - 6x + 10}$$

(acd)

$$5x + 3 \ln(x^2 - 6x + 10) - 8 \operatorname{arctg}(x + 3) + C$$

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

(ace)

$$x + \ln |x| - \frac{1}{2} \ln(1 + x^2) + C$$

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

(acf)

$$x - \frac{5}{2} \ln(x^2 + 3x + 4) - \frac{9\sqrt{7}}{7} \operatorname{arctg} \left(\frac{2x+3}{\sqrt{7}} \right) + C$$

$$\int \frac{x^4}{x^4 - 1} \, dx$$

(acg)

$$x + \frac{1}{4} \ln \left| \frac{x-1}{x+1} \right| + \frac{1}{2} \operatorname{arctg} x + C$$

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

(ach)

$$-\frac{1}{x^2 - 3x + 2} + C$$

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

(aci)

$$x - \ln |x| + \frac{1}{2} \ln(1 + x^2) + C$$

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

(acj)

$$\ln \left| \frac{x}{x+1} \right| + C$$

$$\int \frac{dx}{x^2 - 1}$$

(ack)

$$\frac{1}{2} \ln \left| \frac{x-1}{x+1} \right| + C$$

$$\int \frac{dx}{x^3 + x}$$

(acl)

$$\ln \frac{|x|}{\sqrt{1+x^2}} + C$$

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

(acm)

$$\frac{1}{12} \ln |x-1| - \frac{1}{3} \ln |x+2| + \frac{1}{4} \ln |x+3| + C$$

$$\int \frac{dx}{x(x+1)^2}$$

(acn)

$$\ln \left| \frac{x}{x+1} \right| + \frac{1}{x+1} + C$$

$$\int \frac{2x^2 + 41x - 91}{(x-1)(x+3)(x-4)} \, dx$$

$$4 \ln |x-1| - 7 \ln |x+3| + 5 \ln |x-4| + C$$

(aco)

$$\int \frac{2 dx}{x^2+2x+5}$$

$$\arctg\left(\frac{x+1}{2}\right) + C$$

(acp)

$$\int \frac{dx}{3x^2+5}$$

$$\frac{1}{\sqrt{15}} \arctg \frac{x}{\sqrt{15}} + C$$

(acq)

$$\int \frac{dx}{x^3+1}$$

$$\frac{1}{3} \ln|x+1| - \frac{1}{6} \ln(x^2-x+1) + \frac{1}{\sqrt{3}} \arctg\left(\frac{2x-1}{\sqrt{3}}\right) + C$$

(acr)

$$\int \frac{dx}{x^3+x^2+x}$$

$$\ln|x| - \frac{1}{2} \ln(x^2+x+1) - \frac{1}{\sqrt{3}} \arctg\left(\frac{2x+1}{\sqrt{3}}\right) + C$$

(acs)

$$\int x^2 \sin x dx$$

$$(2-x^2) \cos x + 2x \sin x + C$$

(act)

$$\int e^x \cos 2x dx$$

$$\frac{1}{5} e^x (\cos 2x + 2 \sin 2x) + C$$

(acu)

$$\int (x^2+5) \cos x dx$$

$$(x^2+4) \sin x + 2x \cos x + C$$

(acv)

$$\int x^2 \sinh x dx$$

$$(x^2+2) \cosh x - 2x \sinh x + C$$

(acw)

$$\int (x^2-2x+5)e^{-x} dx$$

$$-(x^2+5)e^{-x} + C$$

(acx)

$$\int x \ln^2 x dx$$

$$\frac{1}{4} (2 \ln^2 x - 2 \ln x + 1) + C$$

(acy)

$$\int e^{-2x} \sin \frac{x}{2} dx$$

$$-\frac{2}{17} e^{-2x} \left(\cos \frac{x}{2} + 4 \sin \frac{x}{2} \right) + C$$

(acz)

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

$$\frac{1}{2} x (\sin(\ln x) - \cos(\ln x)) + C$$

(ada)

$$\int x^2 e^{3x} dx$$

$$\frac{1}{27} e^{3x} (9x^2 - 6x + 2) + C$$

(adb)

$$\int (x^2+5x+6) \cos 2x dx$$

$$\frac{1}{2} (x^2+5x+5) \sin 2x + \frac{1}{4} (2x+5) \cos 2x + C$$

(adc)

$$\int x^3 \cos x dx$$

$$(x^3-6x) \sin x - 3(2-x^2) \cos x + C$$

(add)

$$\int x \ln x dx$$

$$\frac{1}{4} x^2 (2 \ln x - 1) + C$$

(ade)

$$\int x \sin 3x dx$$

$$\frac{1}{9} (\sin 3x - 3x \cos 3x) + C$$

(adf)

$\int 5xe^{-4x} dx$ (adg)	$-\frac{5}{16}e^{-4x}(1+4x)+C$
$\int x \operatorname{arctg} x dx$ (adh)	$\frac{1}{2}((x^2-1)\operatorname{arctg} x+x)+C$
$\int \arccos x dx$ (adi)	$x \arccos x - \sqrt{1-x^2} + C$
$\int x \cosh x dx$ (adj)	$x \sinh x - \cosh x + C$
$\int (2x+1) \cos(\frac{\pi}{3}-5x) dx$ (adk)	$-\frac{1}{5}(2x+1) \sin(\frac{\pi}{3}-5x) + \frac{2}{25} \cos(\frac{\pi}{3}-5x) + C$
$\int \frac{x}{5^x} dx$ (adl)	$-\frac{1}{\ln 5} \frac{x}{5^x} - \frac{1}{\ln^2 5} 5^{-x} + C$
$\int \frac{\ln x}{\sqrt{x}} dx$ (adm)	$2\sqrt{x}(\ln x - 2) + C$
$\int 4x^3 \ln(x^5) dx$ (adn)	$\frac{5}{4}x^4(4 \ln x - 1) + C$
$\int \ln x dx$ (ado)	$x(\ln x - 1) + C$
$\int \frac{\ln x}{x^2} dx$ (adp)	$-\frac{1}{x}(\ln x + 1) + C$
$\int x \cos x dx$ (adq)	$x \sin x + \cos x + C$
$\int xe^{-2x} dx$ (adr)	$-\frac{1}{4}e^{-2x}(2x+1)+C$
$\int \operatorname{arccotg} x dx$ (ads)	$x \operatorname{arccotg} x + \frac{1}{2} \ln(1+x^2) + C$
$\int \frac{x}{\sin^2 x} dx$ (adt)	$-x \cotg x + \ln \sin x + C$
$\int \frac{x \cos x}{\sin^3 x} dx$ (adu)	$-\frac{1}{2} \frac{x}{\sin^2 x} - \cotg x + C$
$\int x \sinh x dx$ (adv)	$x \cosh x - \sinh x + C$
$\int \sqrt{1-x^2} dx$ (adw)	$\frac{1}{2} \arcsin x + \frac{1}{2} x \sqrt{1-x^2} + C$
$\int x \operatorname{tg}^2 x dx$	$x \operatorname{tg} x + \ln \cos x - \frac{1}{2} x^2 + C$

(adx)

$$\int \sqrt{4x - 11} dx$$

$$\frac{1}{6}(4x - 11)^{\frac{3}{2}} + C$$

(ady)

$$\int \frac{6}{5-3x} dx$$

$$-2 \ln |5 - 3x| + C$$

(adz)

$$\int \frac{4x}{4+x^2} dx$$

$$2 \ln(4 + x^2) + C$$

(aea)

$$\int \frac{14 dx}{(2x+3)^8}$$

$$-(2x + 3)^{-7} + C$$

(aeb)

$$\int 10x(x^2 + 7)^4 dx$$

$$(x^2 + 7)^5 + C$$

(aec)

$$\int \frac{x dx}{\sqrt{3-x^2}}$$

$$\sqrt{3 - x^2} + C$$

(aed)

$$\int \frac{x^2}{1+x^6} dx$$

$$\frac{1}{3} \operatorname{arctg} x^3 + C$$

(aee)

$$\int x^5 \sqrt{4 - x^2} dx$$

$$-\frac{5}{12}(4 - x^2)^{\frac{6}{5}} + C$$

(aef)

$$\int \sin^6 x \cos x dx$$

$$\frac{1}{7} \sin^7 x + C$$

(aeg)

$$\int \frac{\sin x}{\sqrt{2+\cos x}} dx$$

$$-2\sqrt{2 + \cos x} + C$$

(aeh)

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

$$\operatorname{arctg}(x + 1) + C$$

(aei)

$$\int \frac{dx}{\sqrt{4x-4x^2}}$$

$$\frac{1}{2} \arcsin(2x - 1) + C$$

(aej)

$$\int \frac{e^{\frac{1}{x}}}{x^2} dx$$

$$e^{\frac{1}{x}} + C$$

(aek)

$$\int (x + 2)e^{x^2+4x-5} dx$$

$$\frac{1}{2}e^{x^2+4x-5} + C$$

(ael)

$$\int \frac{\ln^4 x}{x} dx$$

$$\frac{1}{5} \ln^5 x + C$$

(aem)

$$\int \frac{\cos(\ln x)}{x} dx$$

$$\sin(\ln x) + C$$

(aen)

$$\int e^{\cos^2 x} \sin 2x dx$$

$$-e^{\cos^2 x} + C$$

(aeo)

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

(aep)

$$2 \ln |\sin \sqrt{x}| + C$$

$$\int \frac{\sqrt[3]{\tg^2 x}}{\cos^2 x} dx$$

(aeq)

$$\frac{3}{5} \tg^{\frac{5}{3}} + C$$

$$\int \frac{dx}{\sin^2 x \sqrt{\cotg x - 1}}$$

(aer)

$$-2\sqrt{\cotg x - 1} + C$$

$$\int \frac{2^x}{\sqrt{1-4^x}} dx$$

(aes)

$$\frac{1}{\ln 2} \arcsin 2^x + C$$

$$\int \frac{e^{2x}}{4+e^x} dx$$

(aet)

$$e^x - 4 \ln |4 + e^x| + C$$

$$\int \frac{dx}{(1+x^2) \arctg x}$$

(aeu)

$$\ln |\arctg x| + C$$

$$\int \frac{3 dx}{x\sqrt{1-\ln^2 x}}$$

(aev)

$$3 \arcsin(\ln x) + C$$

$$\int \frac{x}{\sqrt{x^2-4}} dx$$

(aew)

$$\sqrt{x^2-4} + C$$

$$\int \frac{\cos x}{1+\sin x} dx$$

(aex)

$$\ln |1 + \sin x| + C$$

$$\int \sqrt{\cos^3 x} \sin x dx$$

(aey)

$$-\frac{2}{5} \cos^{\frac{5}{2}} x + C$$

$$\int x e^{x^2} dx$$

(aez)

$$\frac{1}{2} e^{x^2} + C$$

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

(afa)

$$\ln |\ln x| + C$$

$$\int x^2 \sqrt{x^3+1} dx$$

(afb)

$$\frac{2}{9} (x^3+1)^{\frac{3}{2}} + C$$

$$\int \frac{dx}{\sqrt{x}(x+4)}$$

(afc)

$$\arctg \frac{\sqrt{x}}{2} + C$$

$$\int \frac{x}{1+x^4} dx$$

(afd)

$$\frac{1}{2} \arctg x^2 + C$$

$$\int \frac{dx}{e^x-1}$$

(afe)

$$x - \ln |1 + e^x| + C$$

$$\int \frac{e^x \sqrt{\arctg e^x}}{1+e^{2x}} dx$$

(aff)

$$\frac{2}{3} \arctg^{\frac{3}{2}} e^x + C$$

$\int \frac{dx}{x\sqrt{x^2-1}} dx$ (afg)	$\arccos \frac{1}{x} + C$
$\int \frac{x dx}{\sqrt{x+1}}$ (afh)	$\frac{2}{3}(x+1)^{\frac{3}{2}} - 2\sqrt{x+1} + C$
$\int \sin 3x dx$ (afi)	$-\frac{1}{3} \cos 3x + C$
$\int \frac{dx}{5-3x}$ (afj)	$-\frac{1}{3} \ln 5-3x + C$
$\int e^{3-2x} dx$ (afk)	$-\frac{1}{2} e^{3-2x} + C$
$\int \sqrt[3]{3x-2} dx$ (afi)	$\frac{1}{4}(3x-2)^{\frac{4}{3}} + C$
$\int (4-7x)^{11} dx$ (afm)	$\frac{1}{48}(4x-7)^{12} + C$
$\int \frac{dx}{\cos^2 5x}$ (afn)	$\frac{1}{5} \operatorname{tg} 5x + C$
$\int \frac{dx}{\sqrt{9-x^2}}$ (afo)	$\arcsin \frac{x}{3} + C$
$\int \frac{dx}{x^2+16}$ (afp)	$\frac{1}{4} \operatorname{arctg} \frac{x}{4} + C$
$\int (3x^2 + 2x - 1) dx$ (afq)	$x^3 + x^2 - x + C$
$\int \left(\frac{2}{x\sqrt{x}} - \frac{5}{x^2} \right) dx$ (afr)	$-\frac{4}{\sqrt{x}} + \frac{5}{x} + C$
$\int x^2(x^2 + 1) dx$ (afs)	$\frac{1}{5}x^5 + \frac{1}{3}x^3 + C$
$\int (x^3 + 1)^2 dx$ (aft)	$\frac{1}{7}x^2 + \frac{1}{2}x^4 + x + C$
$\int \frac{x^3+3x-1}{x} dx$ (afu)	$\frac{1}{3}x^3 + 3x - \ln x + C$
$\int \frac{x^2-3x+4}{\sqrt{x}} dx$ (afv)	$\frac{2}{5}\sqrt{x^5} - 2\sqrt{x^3} + 8\sqrt{x} + C$
$\int \frac{(x-1)^3}{\sqrt{x}} dx$ (afw)	$\frac{2}{7}x^{\frac{7}{2}} - \frac{6}{5}x^{\frac{5}{2}} + 2x^{\frac{3}{2}} - 2x^{\frac{1}{2}} + C$

$$\int \frac{(\sqrt{x}+2)^3}{x} dx$$

(afx)

$$\frac{2}{3}x^{\frac{3}{2}} + 6x + 24\sqrt{x} + 8 \ln |x| + C$$

$$\int (\cos x + 2^5 \sqrt{x^3}) dx$$

(afy)

$$\sin x + \frac{5}{4}x^{\frac{8}{5}} + C$$

$$\int \left(\sin x + \frac{3}{\sqrt{4-4x^2}} \right) dx$$

(afz)

$$-\cos x + \frac{3}{2} \arcsin x + C$$

$$\int \left(2^x + \sqrt{\frac{1}{x}} \right) dx$$

(aga)

$$\frac{2^x}{\ln 2} + 2\sqrt{x} + C$$

$$\int \left(10^{-x} + \frac{x^2+2}{x^2+1} \right) dx$$

(agb)

$$-\frac{10^{-x}}{\ln 10} + x + \arctg x + C$$

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

(agc)

$$\frac{1}{3}x - \frac{1}{3} \arctg x + C$$

$$\int \cotg^2 x dx$$

(agd)

$$-\cotg x - x + C$$

$$\int (\sqrt{x}+1)(x-\sqrt{x}+1) dx$$

(age)

$$\frac{2}{5}x^{\frac{5}{2}} + x + C$$

$$\int \frac{dx}{x^2+7}$$

(agf)

$$\frac{1}{\sqrt{7}} \arctg \frac{x}{\sqrt{7}} + C$$

$$\int 4^{2-3x} dx$$

(agg)

$$-\frac{8}{3 \ln 2} 4^{-3x} + C$$

$$\int \frac{x}{(x+1)^2} dx$$

$$\ln |x+1| + \frac{1}{x+1} + C$$