(1) $\int \frac{2x}{2x+1}\,dx$ $= A(2x+1) + B\ln|2x+1| + C$

(2) $\int x(4-x^2)^{-\frac{1}{2}}\,dx$ $= A(4-x^2)^{B} + C$

(3) $\int \frac{4x}{6x^2-1}\,dx$ $= A\ln|6x^2-1| + C$

(4) $\int \frac{10x}{\sqrt{1-2x}}\,dx$ $= A(1-2x)^{3/2} + B(1-2x)^{D} + C$

(5) $\int \frac{3x^4}{\sqrt{2x^5+1}}\,dx$ $= A(2x^2+1)^{B} + C$

(6) $\int \frac{1-x}{1+2x}\,dx$ $= A\ln|1+2x| + B|1+2x| + C$

(7) $\int \frac{3x-1}{\sqrt{4x-1}}\,dx$ $= A(4x-1)^{B} + D(4x-1)^{\frac{1}{2}} + C$

(8) $\int \frac{1-2x}{1+3x}\,dx$ $= A\ln|1+3x| + B(1+3x) + C$

(9) $\int \frac{6x^{\frac{1}{2}}}{2x^{\frac{3}{2}}+3}\,dx$ $= A\ln|2x^{B}+D| + C$

(10) $\int \frac{x^{\frac{1}{2}}}{\sqrt{1-3x^{\frac{3}{2}}}}\,dx$ $= A\sqrt{1-3x^{B}} + C$

(11) $\int \frac{1+\cos x}{\sin x}\,dx$ Use $u=\cos x$ $= A\ln|\cos x + B| + C$

(12) $\int \frac{1}{1+\sqrt{x-2}}\,dx$ Use $u=\sqrt{x-2}$ $= A\sqrt{x-2} + B\ln|D+\sqrt{x-2}| + C$

(13) $\int \sec^2 x\tan x\sqrt{1+\tan x}\,dx$ Use $u=\sqrt{1+\tan x}$ $= A(B\tan x+D)(E+\tan x)^{F} + C$

(14) $\int \frac{9}{\sqrt{x}(9x-1)}\,dx$ Use $u=\sqrt{x}$ $= A\ln\left|\frac{B\sqrt{x}+D}{E\sqrt{x}+F}\right| + C$