1- a) $\frac{2}{3}\sqrt{x^3}+C$ b) $\frac{e^2}{2}.x^2+C$ c) $-\frac{e^\pi}{x}-\frac{2}{\sqrt{x}}+C$ d) $\frac{3}{2}.\sqrt[3]{h^2}+\frac{h^2}{2}+\frac{2^h}{\ln 2}+C$

e) $\frac{(\frac{5}{2})^x}{\ln(\frac{5}{2})}+C$ f) $\frac{x^3}{3}+\frac{6}{7}x^{\frac{7}{3}}+\frac{3}{5}x^{\frac{5}{3}}+C$ g) $\frac{2}{5}\sqrt{t^5}-\frac{6}{7}\sqrt[6]{t^7}+C$

h) $2\sqrt{x}+\cos x+\frac{2}{5}x^{\frac{5}{2}}+C$ i) $\frac{3}{10}x^{\frac{2}{3}}+6\sqrt{x}+\frac{2}{x}+C$ j) $-\frac{2}{3\sqrt{z^3}}+.e^z-\cos z+C$

2- a) $-\frac{1}{2}.\cos(2x-3)-\frac{5^x}{\ln 5}+C$ b) $\frac{2}{3}.\sqrt{\ln^3 x}+C$

c) $\frac{1}{3}\ln\left|3x^5-x^3\right|+C$ d) $\frac{-1}{\ln(x+1)}+C$

e) $-\frac{1}{3}\ln\left|1-3t^3\right|+C$ f) $e^{senx}+e^{-x}+C$

3- a) $\frac{x^4}{4}(\ln x-\frac{1}{4})+C$ b) $\frac{e^{5y}}{5}.(y^2-\frac{2}{5}y+\frac{2}{25})+C$

c) $-e^{-3x}(\frac{x+2}{3}.+\frac{1}{9})+C$ d) $x.\ln x-x+C$

4- a) $\ln(Cx^2(x-2)^4\left|x-1\right|^3)$ b) $\frac{x^2}{2}+\frac{9}{2}\ln\left|x-3\right|+\frac{9}{2}\ln\left|x+3\right|+C$

c) $\ln(\sqrt{\frac{x}{x+2}}C)$ d) $x-\frac{2}{x+2}+7\ln\left|x-2\right|-2\ln\left|x-1\right|+C$

5- a) $y=e^{(\frac{x^2}{6}+C)}$ b) $\ln x-\frac{x^2}{2}+C=\frac{y^2}{2}$

c) $\frac{1}{sen^2 y}=\frac{1}{\cos^2 x}+C$ d) $-\frac{1}{2\cos^2 y}=3.\ln\left|1-e^x\right|+C$

e) $\frac{y}{y+1}=C.x$

6- a) $\ln(1+y^2)=-\frac{x^3}{3}+\ln 2$ b) $y^2-2y=x^3+2x^2+2x+3$

c) $-\frac{1}{2y^2}=\frac{1}{2}\ln(1+x^2)-\frac{1}{2}$ d) $seny=(1+x^2)^{-1/2}.\sqrt{2}$

7- a) $y = \frac{1}{x^2}(-\cos x + c)$

b) y = $-\frac{senx}{3} + \frac{c}{sen^2 x}$

c) $y = senx - 1 + c.e^{-senx}$

d) $y = x + c(x^2 - x)$

e) $y = \frac{-2}{1+x^2} + c\,(1+x^2)^{-1/2}$

f) $y = (x+1)^n(e^x + c)$

8- a) $e^{x^2/2y^2} = xc$

b) $c.x = sen(\frac{y}{x})$

c) $e^{y^2/2x^2} = xc$

d) $\frac{y}{x}\ .e^{y/x} - e^{y/x} = \ln x + c$

e) $2..(\frac{y}{x})^{-1/2} - \ln(\frac{y}{x}) = \ln x + c$

9- a) $y^{-2} = -3 + c.x^{-2}$

b) $y^{-3} = x + \frac{1}{3} + c.e^{3x}$

c) $y^{-1} = -1 + \frac{1}{x} + c.\frac{1}{x}.e^{-x}$

d) $y^{-1} = \frac{1}{x}.\ln x + c.\frac{1}{x}$

10- a) $yx + \frac{x^4}{2} + \frac{2}{3}y^3 = C$

b) $yx + x - x.\ln x = C$

c) $y^2 x + \frac{x^2}{2} + \frac{y^2}{2} = C$

11- a) $\ln x = \frac{-1}{(\frac{y}{x})^2 - 1} + C$

b) $x.e^x - e^x = -y - seny + C$

c) $y = x.e^{3x} - e^{3x} + x^2 + x + \frac{1}{2} + \frac{5}{2}$

d) $y = x.\ln x - 2x + C$

e) $y = -x - \frac{2x+1}{x+1} - \frac{2}{x+1} + C.\frac{e^x}{x+1}$

f) Homogénea: Queda una integral que no pueden resolver

12- a) $y = C_1.e^{-x} + C_2.e^{-x}.x + x^2 - 4x + 6$

b) $y = C_1 + C_2.e^{-x} - \frac{3}{2}senx - \frac{3}{2}\cos x$

c) $y = C_1.e^{4x} + C_2.e^x + x.e^{4x}$

d) $y = C_1.e^{4x} + C_2.e^x - e^{3x} + \frac{5}{4}$

e) $y = C_1 + C_2.e^{-x} + \frac{3}{2}x^2 - 3x + \frac{1}{10}e^x sen x - \frac{3}{10}e^x \cos x$

f) $y = C_1 + C_2.e^{x} + C_3.e^{-4x} - 3e^{-x}$