Equações Diferenciais: Gabarito EDOs de 1a ordem Separáveis

Prof: Felipe Figueiredo

http://sites.google.com/site/proffelipefigueiredo

Versão: 20150825

1. (a)
$$y = Ke^{2x}$$

(b)
$$y = Ke^{\frac{2}{3}x}$$

(c)
$$y = Ke^{2x} - \frac{1}{2}$$

(d)
$$y = Ke^{10x} - \frac{1}{5}$$

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

(f)
$$y = Ke^{\frac{4}{3}x} + \frac{5}{4}$$

(g)
$$y = Ke^{-\frac{2}{3}x} - \frac{3}{4}$$

(h)
$$y = Ke^{\sqrt{3}x}$$

(i)
$$y = Ke^{2\pi x}$$

(j)
$$y = Kx$$

(k)
$$y = Ke^{x^2}$$

(1)
$$y = Ke^{\operatorname{sen}x}$$

(m)
$$y = Ke^{-x}x^x$$

(n)
$$y = Ke^{rx} - \frac{a}{r}$$

2. (a)
$$y = \frac{1}{x+K}$$

(b)
$$y = \pm \sqrt{-x + K}$$

(c)
$$y = \pm \sqrt{2x + K}$$

(d)
$$y = \pm \sqrt{x^2 + K}$$

(e)
$$y = Ke^{\frac{x^3}{3}}$$

$$\text{(f) } y = -\frac{2}{x^2 + K}$$

(g)
$$y = -\frac{3}{x^3 + K}$$

(h)
$$y = \pm \sqrt{2 \ln x + K}$$