> restart

> $Ecuacion := diff(y(x), x) - \dfrac{y(x)}{x \cdot \cdot 2} = 0$

$$Ecuacion := \frac{d}{dx} y(x) - \frac{y(x)}{x^2} = 0 \tag{1}$$

> $p(x) := -\dfrac{1}{x \cdot \cdot 2};$

$$p(x) := -\frac{1}{x^2} \tag{2}$$

> $IpNeg := -int(p(x), x)$

$$IpNeg := -\frac{1}{x} \tag{3}$$

> $SolucionGeneral := y(x) = C1 \cdot \exp(IpNeg)$

$$SolucionGeneral := y(x) = C1\, e^{-\frac{1}{x}} \tag{4}$$

> $comprobacion := simplify(eval(subs(y(x) = rhs(SolucionGeneral), Ecuacion)))$

$$comprobacion := 0 = 0 \tag{5}$$

> $SolGral := dsolve(Ecuacion)$

$$SolGral := y(x) = \_C1\, e^{-\frac{1}{x}} \tag{6}$$

>
>
>