$$DF := \left(x^2+1\right) y\left(x\right) \frac{\mathrm{d}}{\mathrm{d}x} y\left(x\right) = x\left(1+\left(y\left(x\right)\right)^2\right)$$

$$\left(x^2+1\right) y\left(x\right) \frac{\mathrm{d}}{\mathrm{d}x} y\left(x\right) = x\left(1+\left(y\left(x\right)\right)^2\right)$$

$dsolve(DF)$;

$$y\left(x\right) = \sqrt{\_C1\, x^2 + \_C1 - 1},\ y\left(x\right) = -\sqrt{\_C1\, x^2 + \_C1 - 1}$$

$$y := x \mapsto \sqrt{\_C1\, x^2 + \_C1 - 1}$$

$$x \mapsto \sqrt{\_C1\, x^2 + \_C1 - 1}$$

$isolate\left(y\left(3\right) = 1, \_C1\right)$

$$\_C1 = 1/5$$

$isolate\left(y\left(3\right) = 3, \_C1\right)$

$$\_C1 = 1$$

$isolate\left(y\left(3\right) = -7, \_C1\right)$

$$\_C1 = 5$$