**Solution** (#1613) Set  $z = y^4$  to find

The solution is

$$4z' = 1 + z^2, \qquad z(0) = 1.$$

$$4z' = 1 + z^{2}, z(0) = 1.$$
$$y = \sqrt[4]{\tan\left(\frac{x+\pi}{4}\right)}.$$