Solution (\#1635) Make the substitution $y=x^{2} z$ and the DE becomes

$$
x z^{\prime \prime}+(3-x) z^{\prime}=0
$$

which is separable. We ultimately find

$$
y=x^{2}-x^{2} \int_{1}^{x} t^{-3} e^{t-1} \mathrm{~d} t
$$

