CALCULUS: Graphical, Numerical, Algebraic by Finney, Demana, Watts and Kennedy Chapter 6: Differential Equations 6.1: Solving Basic Differential Equations

Chapter 6.	On Terennal Equations 8.1. Solving Basic Differential Equations
	• Solutions to Differential Equations Solutions to Differential Equations Solutions to Differential Equations
	Find the general solution to the differential equation given below $A) \int \frac{dy}{dx} = \csc x \cot x - e^{-x} \qquad B) \int \frac{dy}{dx} = \int 2^{x} \ln 2 + \frac{1}{\sqrt{1 - x^{2}}}$ $y = -\csc x + e^{-x} + C \int y = 2^{x} + \arcsin(x) + C$
	$C) \int \frac{dy}{dx} = 5x^{4} \sec^{2}(\underline{x}^{5}) \qquad D) \int \frac{dy}{dx} = 10(\cos x)^{4} \sin x$
	$y = + (an(x^5) + C)$ $y = -10(cos x)^5$ $y = -2(cos x)^5 + C$ $\int \frac{1}{x} = 2n x + C$
	$\int \frac{1}{x^2} = \int x^{-2} = -1x^{-1} = -\frac{1}{x} + C$
	$\int \frac{1}{\sqrt{x}} = \int \chi^{-1/2} = 2 \chi^{1/2} + C$