

$y = \frac{1}{2x+1}$	$\frac{dy}{dx} + \frac{y}{(x+1)} = 0$	$\frac{dy}{dx} + 2y = 0$	$y = \frac{1}{x+1}$
$\frac{dy}{dx} + y \cot x = 0$	$y = 2x + 1$	$\frac{dy}{dx} - 2y = 0$	$\frac{dy}{dx} + y \tan x = 0$
$y = \sec x$	Finish	$\frac{dy}{dx} - \frac{y}{x} = 0$	$y = \sin x$
$\frac{dy}{dx} + \frac{y}{x} = 0$	$y = e^{2x}$	$\frac{dy}{dx} + \frac{2y}{(2x+1)} = 0$	$y = x$
$y = x + 1$	$y = \frac{1}{x}$	$\frac{dy}{dx} + \frac{y}{(2x+1)} = 0$	$y = e^{-2x}$
$\frac{dy}{dx} - \frac{y}{(x+1)} = 0$	$y = \sqrt{2x+1}$	Start Match the DEs with their integrating factors	$\frac{dy}{dx} - \frac{2y}{(2x+1)} = 0$