

4.9: LIST OF GENERAL ANTIDERIVATIVES

FUNCTION	ANTIDERIVATIVE
$f(x) = x^n \quad (n \neq -1)$	$F(x) = \frac{1}{n+1}x^{n+1} + C$
$f(x) = x^{-1} = \frac{1}{x}$	$F(x) = \ln x + C$
$f(x) = e^x$	$F(x) = e^x + C$
$f(x) = \cos(x)$	$F(x) = \sin(x) + C$
$f(x) = \sec^2(x)$	$F(x) = \tan(x) + C$
$f(x) = \sec(x) \tan(x)$	$F(x) = \sec(x) + C$
$f(x) = \sin(x)$	$F(x) = -\cos(x) + C$
$f(x) = \csc^2(x)$	$F(x) = -\cot(x) + C$
$f(x) = \csc(x) \cot(x)$	$F(x) = -\csc(x) + C$
$f(x) = \frac{1}{1+x^2}$	$F(x) = \tan^{-1}(x) + C$