

## REVIEW OF ANTIDERIVATIVES

A. Recall that if  $F(x)$  is an antiderivative of a differentiable function  $f(x)$ , then  $F'(x) = f(x)$ .

B. Let's recall some antiderivatives:

Function	Antiderivative
$x^n, n \neq -1$	$\frac{1}{n+1}x^{n+1}$
$\sin x$	$-\cos x$
$\cos x$	$\sin x$
$e^x$	$e^x$
$\frac{1}{x}$	$\ln x$

## TEAM ACTIVITIES:

1. Find the antiderivative of each of the following functions:

(a)  $f(x) = 9 - x$

(b)  $g(x) = \sin x + 3x$

(c)  $h(x) = 3 + x^3 - x^{1/3}$

(d)  $f(t) = e^t - \cos t$

(e)  $g(u) = \frac{13}{u}$