

Fill in the Blanks

Mean Value of a Function

$f(x)$	a	b	$b - a$	Mean Value of $f(x)$ in the interval $[a, b]$		Mean Value of $f(x) - 3$	Mean Value of $-2f(x)$
x^3	1	4	3	$\frac{1}{3} \int_1^4 x^3 dx = \frac{1}{3} \left[\frac{x^4}{4} \right]_1^4$			
e^{2x}	0	2	2				
$\sqrt{1 + 2x}$	0	4					
$\sin(3x)$	0	π					
$(1 - x)^2$	1				$\frac{25}{12}$		
$\frac{1}{\sqrt{x + 2}}$		7			$\frac{1}{2}$		
$\cos\left(\frac{x}{4}\right)$	$-\pi$						$\frac{-8 - 4\sqrt{2}}{3\pi}$