

# E-Learning Activity

1.  $T(x) = x^2 + \log x + 98$  degrees Fahrenheit gives the temperature of an oven  $x$  minutes after it's been turned on,  $0.3 < x < 15$ . Complete the table below

$x < 1$	Slope of secant line from $(1, 99)$ to $(x, T(x))$	$x > 1$	Slope of secant line from $(1, 99)$ to $(x, T(x))$
$x = 0.5$		$x = 1.5$	
$x = 0.6$		$x = 1.4$	
$x = 0.7$		$x = 1.3$	
$x = 0.8$		$x = 1.2$	
$x = 0.9$		$x = 1.1$	

1a. Using the table above, estimate  $f'(1)$ , and then write a sentence of interpretation for this.

1b. Find the percentage rate of change when  $x = 1$  and then write a sentence of interpretation for this.