

# It's Approx. – 600

- The population of deer in a park is increasing. The number of deer is modeled by a twice-differentiable function  $d$  of time, where  $t$  is measured in years. For  $0 < t < 10$ , the graph of  $d$  is concave down.

$t$ (years)	1	2	5	7	10
$d'(t)$ (deer per year)	72	63	42	29	12

There are 500 deer in the park when  $t = 2$ . The approximation for the number of deer in the park at  $t = 4$  and the relation of this approximation to the actual value

- A) 626, greater than the actual value      B) 626, less the actual value  
C) 761, greater than the actual value      D) 761, less the actual value