

It's Approx. – 1200

- (Calculator allowed) An amusement park opens at 9 AM but its most popular roller coaster doesn't open until 10 AM and people line up. Below is a table for values of $r(t)$ (the twice-differentiable function representing the number of people in line for the roller coaster at selected times of the day), $r'(t)$, and $r''(t)$. Using trapezoids, the approximate value of the average rate of change of people in line in people per hour from 10 AM until 5 PM

time	10 AM	12 Noon	1 PM	2 PM	4 PM	5 PM
$r(t)$	400	430	480	560	840	1,050
$r'(t)$	10	35	65	100	185	230
$r''(t)$	15	25	35	38	45	50

A) 34

B) 72

C) 96

D) 593