7. Given the function $d(x)=x^2+2x$,
the average rate of change from $x=1$ to $x=5$ is:

9

-8

8

7

Solution

Using the average rate of change formula:

The average rate of change $= \frac{d(5)-d(1)}{5-1}$

$= \frac{(1(5)^2+2(5))-(1(1)^2+2(1))}{4}$

$= \frac{35-3}{4}$

$= 8$