

3. Given the function $e(j) = j^2 + 4j$,
the average rate of change from $j=0$ to $j=5$ is:

10

-9

9

8

Solution

Using the average rate of change formula:

$$\text{The average rate of change} = \frac{e(5) - e(0)}{5 - 0}$$

$$= \frac{(1(5)^2 + 4(5)) - (1(0)^2 + 4(0))}{5}$$

$$= \frac{45 - 0}{5}$$

$$= 9$$