9. Given the function $n(c) = c^2 + 2c$,
the average rate of change from c=3 to c=5 is:

11

−10

10

9

Solution

Using the average rate of change formula:

The average rate of change $= \dfrac{n(5) - n(3)}{5 - 3}$

$= \dfrac{(1(5)^2 + 2(5)) - (1(3)^2 + 2(3))}{2}$

$= \dfrac{35 - 15}{2}$

$= 10$