1. Given the function $n(a)=2a^2+3a$,
the average rate of change from $a=0$ to $a=4$ is:

12

-11

11

10

Solution

Using the average rate of change formula:

The average rate of change $= \frac{n(4)-n(0)}{4-0}$

$= \frac{(2(4)^2+3(4))-(2(0)^2+3(0))}{4}$

$= \frac{44-0}{4}$

$= 11$