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

14

−13

13

12

Solution

Using the average rate of change formula:

The average rate of change $= \dfrac{f(5) - f(1)}{5-1}$

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

$= \dfrac{55-3}{4}$

$= 13$