2. Given the function $d(f) = f^2 + 3f$,
the average rate of change from $f=3$ to $f=4$ is:

11

−10

10

9

Solution

Using the average rate of change formula:

The average rate of change $= \dfrac{d(4) - d(3)}{4 - 3}$

$= \dfrac{(1(4)^2 + 3(4)) - (1(3)^2 + 3(3))}{1}$

$= \dfrac{28 - 18}{1}$

$= 10$