

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

16

-15

15

14

### Solution

Using the average rate of change formula:

$$\text{The average rate of change} = \frac{x(4) - x(3)}{4 - 3}$$

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

$$= \frac{36 - 21}{1}$$

$$= 15$$