

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

16

-15

15

14

### Solution

Using the average rate of change formula:

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

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

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

$$= 15$$