

3. Given the function $c(v) = v^2 + v$,
the average rate of change from $v = -1$ to $v = 6$ is:

7

-6

6

5

Solution

Using the average rate of change formula:

$$\text{The average rate of change} = \frac{c(6) - c(-1)}{6 - (-1)}$$

$$= \frac{(1(6)^2 + 1(6)) - (1(-1)^2 + 1(-1))}{7}$$

$$= \frac{42 - 0}{7}$$

$$= 6$$