1. Given the function $a(t)=2t^2+4t$ ,
the average rate of change from $t=-2$ to $t=5$ is:

11

-10

10

9

**Solution**

Using the average rate of change formula:

The average rate of change $= \frac{a(5)-a(-2)}{5-(-2)}$

$= \frac{(2(5)^2+4(5))-(2(-2)^2+4(-2))}{7}$

$= \frac{70-0}{7}$

$= 10$