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

15

-14

14

13

Solution

Using the average rate of change formula:

The average rate of change $= \frac{t(4)-t(2)}{4-2}$

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

$= \frac{40-12}{2}$

$= 14$