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

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-20

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Solution

Using the average rate of change formula:

The average rate of change $= \frac{y(5)-y(3)}{5-3}$

$= \frac{(2(5)^2+4(5))-(2(3)^2+4(3))}{2}$

$= \frac{70-30}{2}$

$= 20$