1) Use Euler's method with step size 0.5 to compute the approximate y-values y_1, y_2, y_3, and y_4 of the solution of the initial value problem $y' = y - 2x$, $y(1) = 0$.

$$\boxed{\begin{aligned} y_1 &= -1 \\ y_2 &= -3 \\ y_3 &= -6.5 \\ y_4 &= -12.25 \end{aligned}}$$

2) Use Euler's method with step size 0.1 to estimate $y(0.5)$, where $y(x)$ is the solution to the initial-value problem $y' = y + xy$, $y(0) = 1$.

$$\boxed{y(0.5) \approx 1.7616}$$