First simplify by applying the distributive property. Then combine like terms.

$8\left(mn^2 + m\right) - 4m\left(6n^2 + 3\right) + 2m = 8mn^2 + 8m - 24mn^2 - 12m + 2m$

$= (8 - 24)mn^2 + (8 - 12 + 2)m = -16mn^2 - 2m$