1.) Sparke & Gallagher Problem 4.8 (the meaning of “yield”)

THE KEY TO THIS PROBLEM:
EXPRESS THE MEAN Z IN TERMS OF AN INTEGRAL WITH dM.

2.) Sparke & Gallagher Problem 4.9 (pre-enrichment, related to G dwarf problem)

3.) a.) Sparke & Gallagher Problem 4.10 (metallicity evolution with inflow)

b.) PLUS use this result to comment on the G-dwarf problem in the local Milky Way. More specifically, what value of ν gives the (roughly) correct ratio of low metallicity stars in the disk of the Milky Way, i.e., $M_*(<Z_{\odot}/4)/M_*(<Z_{\odot}) = 0.2$?