

CHEM-450

Quiz # 2

Q1. Identify the type of molecular weight (*i.e.*, \overline{M}_n , \overline{M}_w , *etc.*, ...) obtained from each of the following techniques:

- | | |
|-----------------------------------|-------------------------|
| (a) osmometry | (b) cryometry |
| (c) end-group analysis | (d) viscometry |
| (e) light scattering | (f) ultracentrifugation |
| (g) gel permeation chromatography | (h) ebulliometry |

Q2. Two hundreds grams of polymer consist of the fractions shown in the following table:

Fraction	Mass (g)	Molecular Weight (g/mol)
I	100	2×10^3
II	50	2×10^4
III	50	1×10^5

What are the values of \overline{M}_n , \overline{M}_w , and the polydispersity index of the sample?