SEB does not simplify equations, hence below are the raw output of running exercise 2.

(using cout << latex << F << endl; to generate LaTeX compatible equations.)

Exercise 2a: The form factor of an A-A structure (a 2 chain):

$$\frac{1}{2}\frac{\beta_{rod}^2 F_{rod} + A_{rod:end1}\beta_{rod}^2 A_{rod:end2}}{\beta_{rod}^2}$$

After clean up:

$$\frac{1}{2}\left(F_{rod} + A_{rod:end1}A_{rod:end2}\right)$$

The form factor of an A-A-A structure (a 3 chain) would be:

$$\frac{1}{9}\frac{3\beta_{rod}^2 F_{rod} + 2A_{rod:end1}\beta_{rod}^2\psi_{rod:end1,end2}A_{rod:end2} + 4A_{rod:end1}\beta_{rod}^2 A_{rod:end2}}{\beta_{rod}^2}$$

After clean up:

$$\frac{1}{9}\left(3F_{rod} + 4A_{rod:end1}A_{rod:end2} + 2A_{rod:end1}\psi_{rod:end1,end2}A_{rod:end2}\right)$$

Exercise 2b: The form factor of a A-B structure:

$$\frac{\beta_B^2 F_B + F_A\beta_A^2 + 2\beta_B A_{A:end2}\beta_A A_{B:end1}}{\beta_B^2 + \beta_A^2 + 2\beta_B\beta_A}$$

After clean up:

$$\frac{\beta_B^2 F_B + \beta_A^2 F_A + 2\beta_B\beta_A A_{A:end2}A_{B:end1}}{}$$

Exercise 2c: The form factor of an A-B-C structure:

$$\frac{2\beta_C\psi_{B:end1,end2}\beta_A A_{A:end2}A_{C:end1} + \beta_C^2 F_C + F_A\beta_A^2 + 2\beta_C A_{B:end2}A_{C:end1}\beta_B + F_B\beta_B^2 + 2A_{B:end1}\beta_A A_{A:end}}{\beta_C^2 + \beta_B^2 + 2\beta_C\beta_A + 2\beta_A\beta_B + 2\beta_C\beta_B + \beta_A^2}$$

After clean up:

$$\frac{F_A\beta_A^2 + F_B\beta_B^2 + \beta_C^2 F_C + 2\beta_A\beta_B A_{A:end2}A_{B:end1} + 2\beta_B\beta_C A_{B:end2}A_{C:end1} + 2\beta_A\beta_C A_{A:end2}\psi_{B:end1,end2}A_{C:}}{(\beta_A + \beta_B + \beta_C)^2}$$