



$$z = (5 + 11 + 12 + 15 + 16) - (6 + 13 + 14 + 17 + 18)$$

$$y = (3 + 7 + 8 + 15 + 17) - (4 + 9 + 10 + 16 + 18)$$

$$x = (1 + 7 + 9 + 11 + 13) - (2 + 8 + 10 + 12 + 14)$$

Second, the momenta of the fluid in the z , y , and x directions are

$$\rho_n u_i = (f_5 + f_{11} + f_{12} + f_{15} + f_{16}) - (f_6 + f_{13} + f_{14} + f_{17} + f_{18}), \quad (3.43)$$

$$0 = (f_3 + f_7 + f_8 + f_{15} + f_{17}) - (f_4 + f_9 + f_{10} + f_{16} + f_{18}), \quad (3.44)$$

$$0 = (f_1 + f_7 + f_9 + f_{11} + f_{13}) - (f_2 + f_8 + f_{10} + f_{12} + f_{14}), \quad (3.45)$$