

$$Z \left(\begin{array}{cc} (+ & +) \\ \swarrow & \searrow \\ (+ & +) \end{array} \right) = \left[\frac{1}{2} \right] = \boxed{\exp\left(\frac{1}{2} \downarrow \cdots \downarrow\right)} = \text{Diagram 1} + \frac{1}{2} \text{Diagram 2} + \frac{1}{8} \text{Diagram 3} + (\text{deg} \geq 3),$$

$$Z \left(\begin{array}{cc} (+ & +) \\ \swarrow & \searrow \\ (+ & +) \end{array} \right) = \left[-\frac{1}{2} \right] = \boxed{\exp\left(-\frac{1}{2} \downarrow \cdots \downarrow\right)} = \text{Diagram 1} - \frac{1}{2} \text{Diagram 2} + \frac{1}{8} \text{Diagram 3} + (\text{deg} \geq 3),$$

$$Z \left(\begin{array}{cc} & \curvearrowright \\ \swarrow & \searrow \\ (+ & -) \end{array} \right) = \text{Diagram 4} = \text{Diagram 5} + \frac{1}{48} \text{Diagram 6} + (\text{deg} \geq 4), \quad Z \left(\begin{array}{c} (+ \quad -) \\ \curvearrowright \end{array} \right) = \text{Diagram 7},$$

$$Z \left(\begin{array}{ccc} + & (++) & \\ \downarrow & \swarrow & \downarrow \\ (++) & & + \end{array} \right) = \Phi, \quad Z \left(\begin{array}{ccc} (++) & + & \\ \downarrow & \swarrow & \downarrow \\ + & (++) & \end{array} \right) = \Phi^{-1};$$