

$$\begin{aligned}
 & \text{Diagram 1} = \phi^{-1} \text{Diagram 2} + \phi^{-\frac{1}{2}} \text{Diagram 3} \\
 & \text{Diagram 4} = \phi^{-1} \text{Diagram 5} + \phi^{-\frac{1}{2}} \text{Diagram 6} \\
 & \text{Diagram 7} = \text{Diagram 8} + \text{Diagram 9}
 \end{aligned}$$

The diagrams are Feynman-like diagrams with vertical black lines representing external states and red lines representing internal interactions.

- Diagram 1:** Two horizontal red lines between two vertical black lines, with a vertical dotted red line connecting them.
- Diagram 2:** Two vertical black lines connected by two semi-circular red arcs (one on each side) and a horizontal dotted red line in the center.
- Diagram 3:** Two vertical black lines connected by two semi-circular red arcs (one on each side) and a horizontal solid red line in the center.
- Diagram 4:** Two vertical black lines connected by two horizontal dotted red lines (one on each side) and a central circular red loop.
- Diagram 5:** Two vertical black lines connected by two horizontal solid red lines (one on each side) and a central circular red loop.
- Diagram 6:** Two vertical black lines connected by a single horizontal dotted red line.
- Diagram 7:** Two vertical black lines connected by a single horizontal solid red line.
- Diagram 8:** Two vertical black lines connected by a single horizontal dotted red line.
- Diagram 9:** Two vertical black lines connected by a single horizontal solid red line.