

$$\begin{aligned}
 & -4 \left(\prod_i \left(\text{Diagram 1} \right) \right) \left(\text{Diagram 2} - \text{Diagram 3} \right) \left(\text{Diagram 4} - 2 \text{Diagram 5} \right)
 \end{aligned}$$

The diagram illustrates a mathematical expression involving several geometric and combinatorial components:

- Diagram 1:** A graph structure with two vertical columns of nodes. The left column has two black circles, and the right column has two black squares. A vertical line connects the two circles on the left, and another vertical line connects the two squares on the right. Diagonal lines cross between the columns, forming an X shape. This diagram is enclosed in large parentheses and preceded by a -4 and a product symbol \prod_i .
- Diagram 2:** A gray-shaded region with a complex, multi-lobed boundary. It has four vertices marked with black symbols: two circles at the top and two squares at the bottom.
- Diagram 3:** A gray-shaded region with a similar boundary to Diagram 2, but with the top vertices marked with black squares and the bottom vertices marked with black circles.
- Diagram 4:** A gray-shaded region with a complex boundary, featuring a small white circular hole at the bottom. The top boundary is connected to a vertical structure.
- Diagram 5:** A gray-shaded region with a complex boundary, similar to Diagram 4 but with a different internal structure. The top boundary is connected to a vertical structure.

The expression is structured as follows:

- A factor of -4 is multiplied by a product \prod_i of Diagram 1.
- This is multiplied by the difference between Diagram 2 and Diagram 3.
- Finally, this is multiplied by the difference between Diagram 4 and 2 times Diagram 5.