Write a complete C++ program that does the following:

a. Prompts user to enter a positive odd integer $n < 30$. If the inputted value is incorrect, the program repeatedly force user to input values until $n$ is within the expected value.

b. The program then prints the two diagrams – large asterisks sign, and a plus sign.

For example, if the user enters 9 for $n$, the output is as follows:

Diagram 1:
```
*   *   *
*   *   *
*   *   *
***
*********
***
*   *   *
*   *   *
*   *   *
```

Diagram 2:
```
***
* *
* *
**** ****
* *
**** ****
* *
* *
***
```