Lab 02 - Display Problems

Direction: Submit typed work in the Labs directory of your github repository and/or dropbox. Each part should be a separate .cpp file. The files named should be `"lab2A.cpp"` and `"lab2B.cpp"` respectively.

Part A: In class

Your objective is to write a complete cpp program that displays an expression from the given set of operands that results to 24 for each problem. For each expression, you must use each operand exactly once. Likewise, you can use the operations addition, subtraction, multiplication and division; however, whenever you use division, the divisor must go into the dividend evenly to be considered accurate. For instance, if the operands are 1, 2, 3, and 8, the program could display `"(2 - 1) * 3 * 8 = 24"`, `"(3 + 1) * (8 - 2) = 24"` or `"(8 * 3) / (2 - 1)"`. There can be multiple ways to result to 24 as seen; however, you are required to display only one possibility. Furthermore, each expression should be on its own line and the display of the solution must be the int expression argument i.e your display must consists of at least two qrguments (a string literal and int expression).

☐ Operands = $\{1, 2, 5, 9\}$

☐ Operands = $\{5, 5, 7, 7\}$

Part B: Take home
Your objective is to write a complete cpp program that displays each of the desired images. Use as many cout statements as needed.

☐ Display a rectangle of asterisks that has a length of 11 asterisks and a width of 9 asterisks with a blank 3 by 3 square in its center.

☐ Display the image below

```
* * * * * *  * * * * * *
* * * * * *  * * * * * *
  * *          * *
  * *          * * * * * *
  * *          * * * * * *
  * *          * *
* * * * * *  * *
* * * * * *  * *
```

☐ Display the triangle below rotated 180° degree counter-clockwise about the right angle corner

```
*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * * *
```