Print side by side

/* given width height and n
* print n side by side, side triangle of *
* Ex: if width is 3, it looks like following
*  *  *
**  **  **
************
**  **  **
*  *  *
finish printing a line before go on to next */

for (int r = 1; r <= height; r++) {
    for (int repeat = 1; repeat <= n; repeat++) {
        for (int c = 1; c <= width; c++) {
            if (r >= c && r + c <= height + 1)
                cout << "*";
            else
                cout << " ";
        }
    } cout << endl; }
/* given an odd value size, print a cross
* Ex: if size is 5, it looks like following
*     |   |   |
*     |   |   |
*     +   +   |
* on mid column: c == size / 2 - 1
* on mid row: r == size / 2 - 1
* on mid row and column
*/
int mid = size / 2 - 1;
for (int r = 1; r <= size; r++) {
    for (int c = 1; c <= size; c++){
        if (c == mid && r == mid ) cout << "+";
        else if (c == mid ) cout << "|";
        else if (r == mid ) cout << "-";
        else cout << " ";
    }
    cout << endl;
}
Print first n odd value & sum

/* print a table of 10 lines
* each line has first n odd values and their sum
* first 5 lines look like following
1=1
1+3=4
1+3+5=9
1+3+5+7=16
1+3+5+7+9=25
*/

for (int r = 1; r <= 10; r++) {
    int sum = 0;
    for (int c = 1; c < r; c++){
        cout << 2 * c - 1 << “+”;
        sum += 2 * c - 1;
    }
    sum += 2 * r - 1;
    cout << 2 * r - 1 << “=” << sum << endl;
}