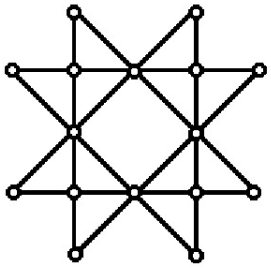
Problem A: Eight Pointed Star



You see that star on the right? That's an eight pointed star. It's pretty cool. For example, you can start at any point and draw every segment without ever lifting the pen off the paper **or** crossing a line that you've already drawn.

See if you can make your computer output one of these stars. Observe the star is made out of 28 separate segments. The horizontal and vertical segments are of length 1, and the diagonal segments have length of $\sqrt{2}$. The lattice points the star intersects are marked by circles. Your goal is to increase the segment lengths of the star by an integer factor, and output the lattice points that the star intersects.

Input Specification:

The input consists of a series of at most 25 test cases. On each line is a single positive integer $K \leq 25$, the length of a vertical/horizontal segment of the star (the length of diagonal segments will be $K\sqrt{2}$). The input ends on EOF.

Output Specification:

For each test case, output the star in all its ASCII glory, with $*$ representing the lattice points. Do **not** output any trailing blank spaces on a line. Do **not** output blank lines between test cases. A star of segment length K will result in $4K + 1$ lines of output. Failing to follow the output format exactly will likely result in your program being judged as incorrect.

Sample Input:

```
3
```

Sample Output:

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

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