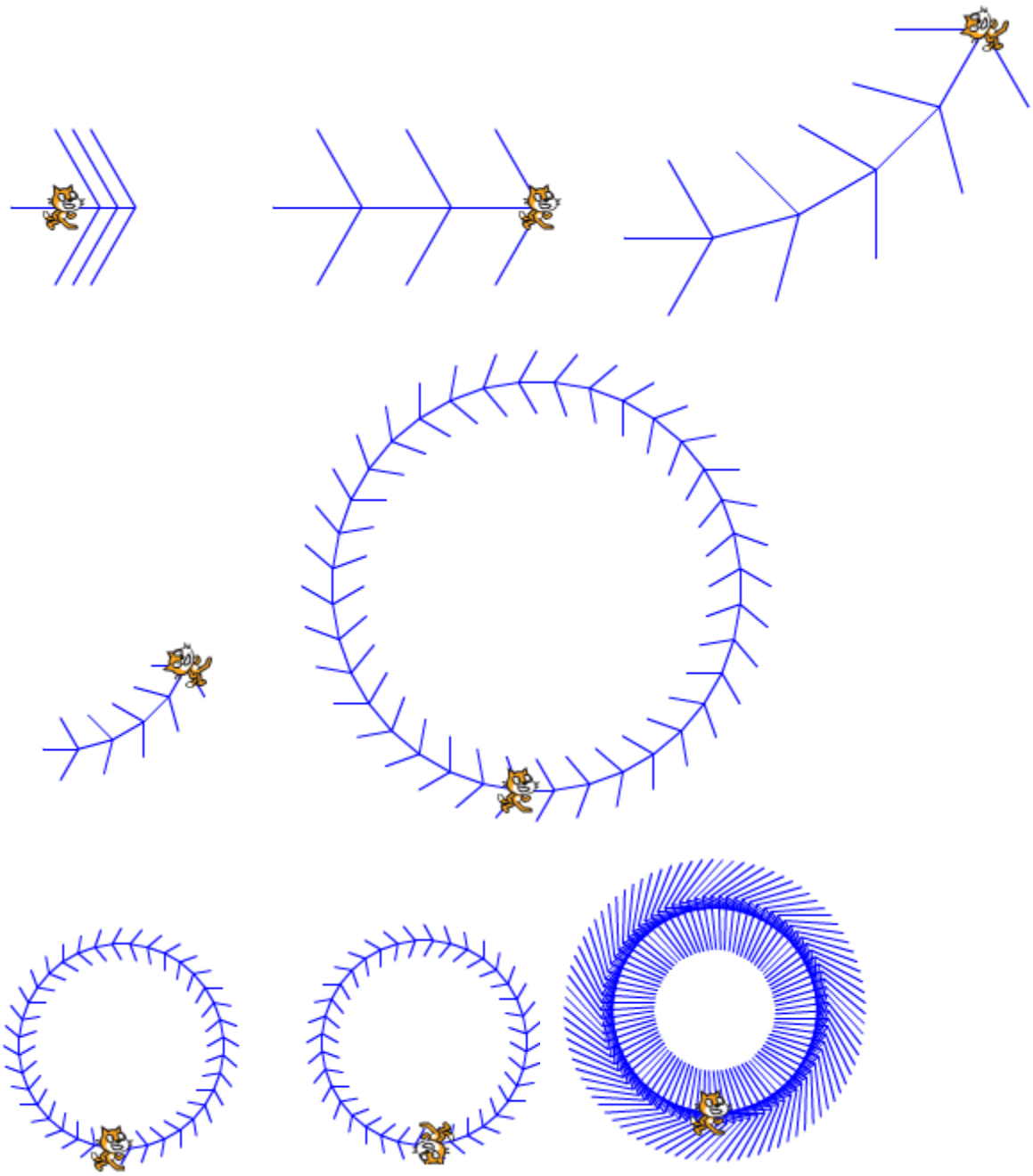
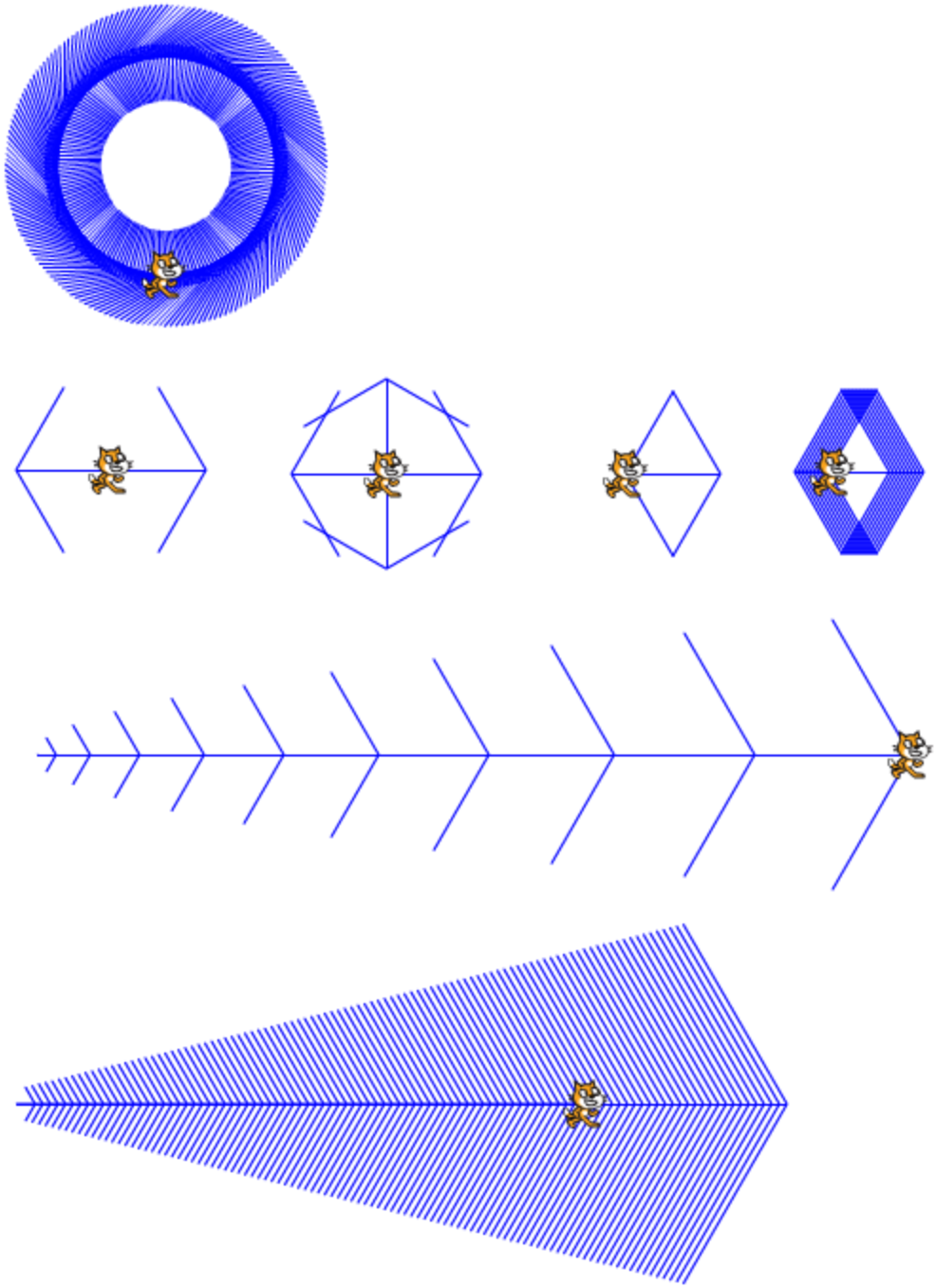
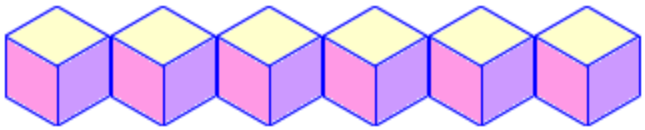
Q*bert Challenges 1

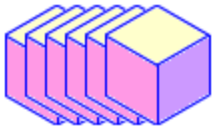
1. Let's use **repeat** loops to draw some patterns with the arrow. How many of these can you draw?

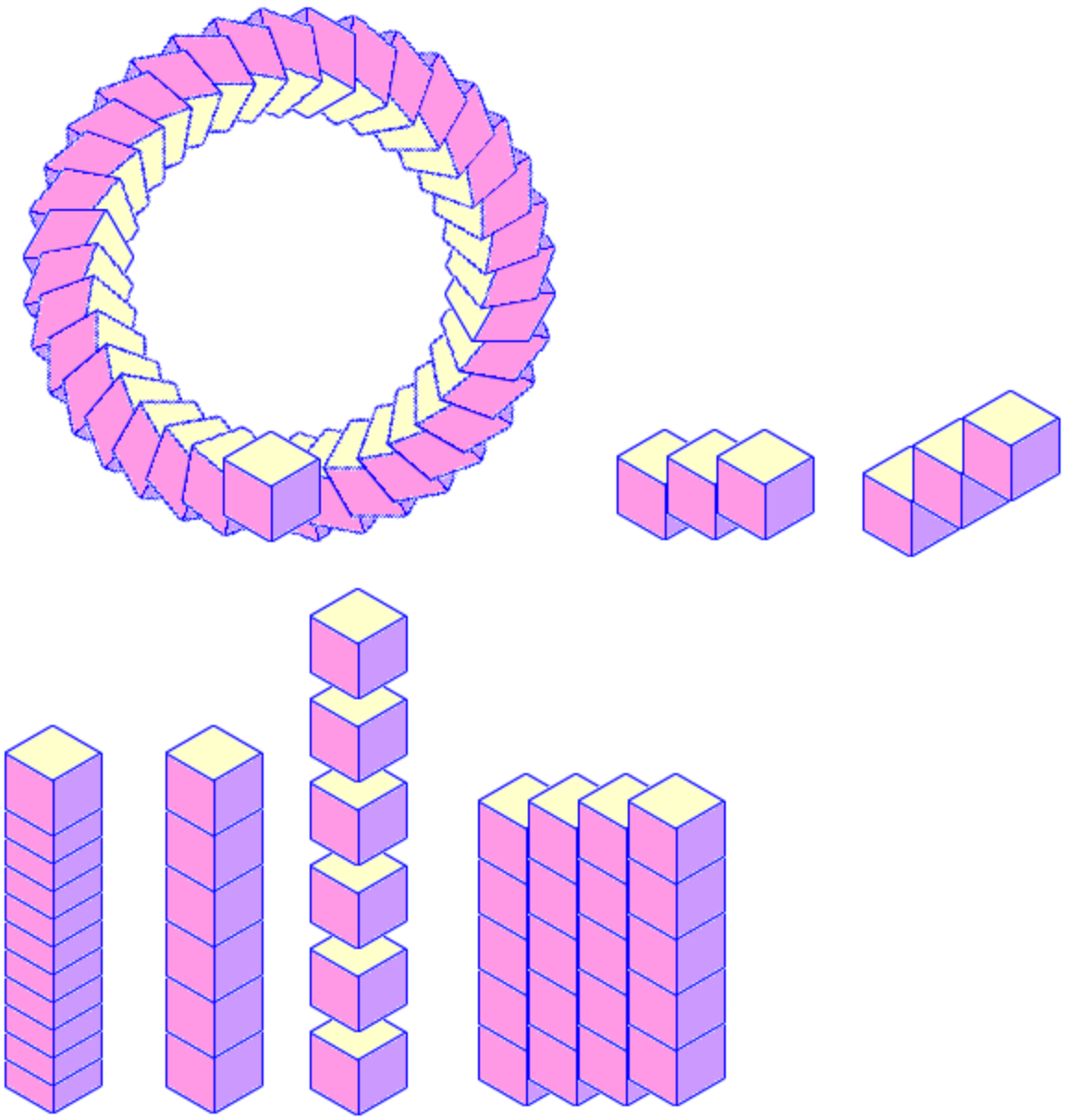


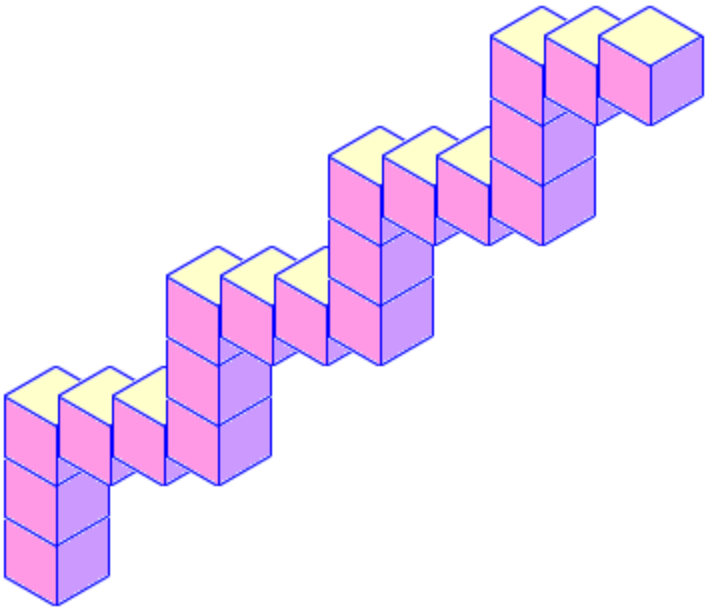


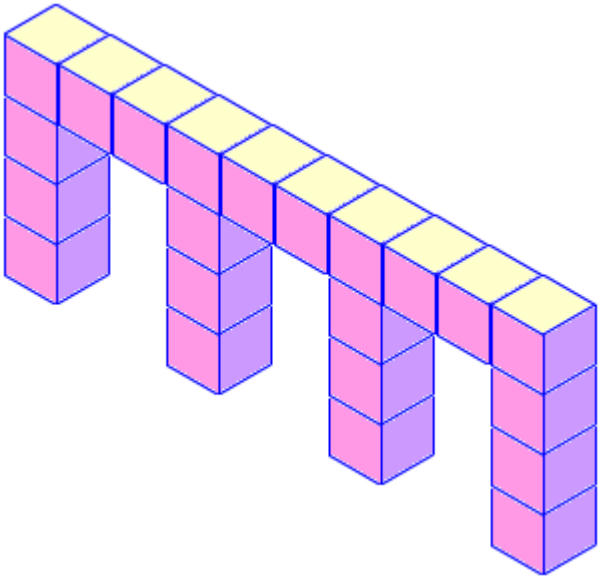
2. Now let's see what we can do by stamping that box. How many of these can you make?

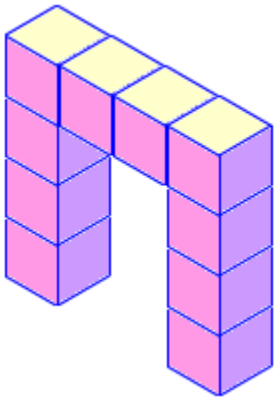












Q*bert Challenges 2

3. Using the right costume.
    - In each of the key handlers (a, d, q, and e), change qbert's costume to he's facing in the right direction for the way he's moving.

4. Qbert dies.
    - Finish the "Check Death" block. It should look at the two variables "qbert row" and "qbert box within row" and if they look bad (what does it mean to look bad?) qbert should say "uh oh!" and then fall down until he gets past the bottom of the screen. You can then pop him back up to square 1 1.

5. Qbert jumps.
    - Using "glide" to move qbert isn't so great because he doesn't look like he's jumping from block to block. In the "d" key handler, use the "Jump Down Right" block instead of "Go To Position" to make qbert jump nicely when you press the "d" key. Now write three other new blocks for the other keys: "Jump Down Left", "Jump Up Right", "Jump Up Left".
    - Super challenge: You will notice that your four "Jump …" blocks have very similar code. Make a single new block called "Jump" that can jump in any direction by taking two additional inputs.

Q*bert Challenges 3

THE GAME

6. Make it so there's just one snake.
7. Make it so there's five snakes.
8. Make it so the snakes pause for a while before jumping each time.
9. Make it so when the snake dies and falls to the ground it splats instead of just disappearing. (You can make qbert splat also if you want.)

10. Add sound effects for when: Qbert or snake jumps, Qbert or snake falls, Qbert touches a snake. Qbert wins.

11. Make qbert do a summersault as he's jumping from one block to another.

12. Make a variable called "score". It starts at 0. Each time you change a block color, you get a point. Each time a snake dies, you get a point. Each time qbert falls off the board you lose 10 points. Each time qbert touches a snake you lose 5 points.

13. Make it so the blocks have three colors instead of just two. The blocks start with the yellow top. The first time qbert jumps on a block it changes to the blue top. The second time qbert jumps on a block it changes to a pink top. Make it so you only win when all blocks are pink.

14. Make it so the blocks have just two colors, but each time qbert jumps on a block it changes from one color to the other. The goal of the game is still to make all the blocks blue. (They all start yellow as usual.)