# Varying the number of vertices in the parent polygon, *n*.

The number of vertex rays (lines to the center from each red vertex) is *n*. Choose a value of jumps, *J*, and stick to it for both images (try a number from 1 and 5). Start at the top and move in one dot each time you move to the next vertex ray. In 10 lines you will have the completed figure.

What value of *J* are you using? _____ (choose a number from 1 to 5).

What is *n* below? If you do not know, count the **outer** dots around the circle. _____   What is *n* below? _____
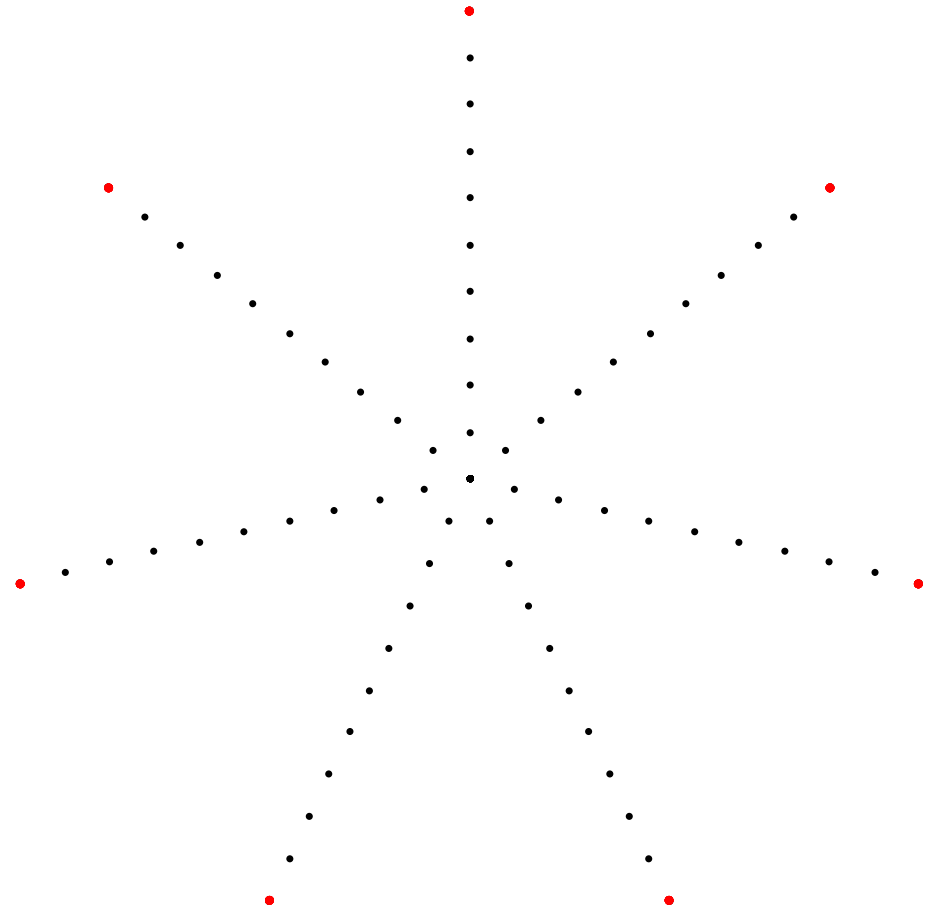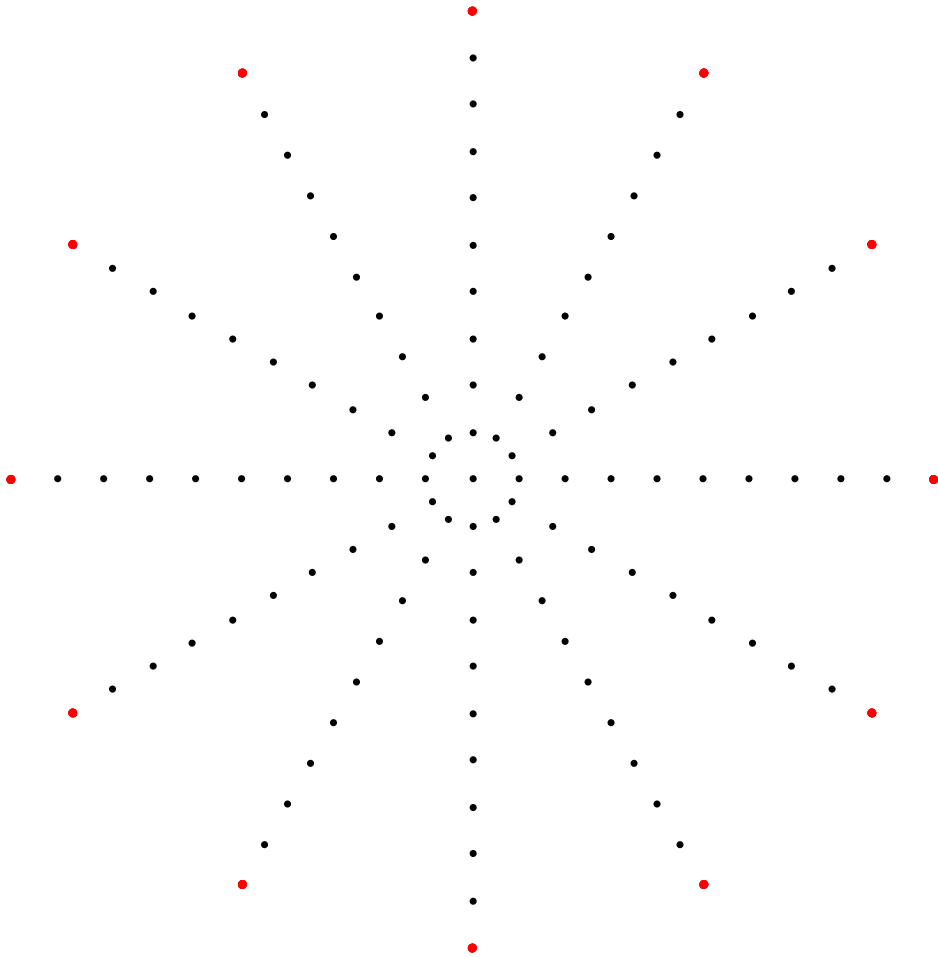
Varying the number of dots on each vertex ray (the radius reduction factor), *r*.

The number of segments between dots on each vertex ray (from center to outside) is *r*. Choose a value of jumps and stick to it (try a number between 1 and 3).
Start at the top and move in one dot each time you move to the next vertex ray.

What value of *J* are you using? _____ (choose a number from 1 to 3).

What is *r* here? _____   What is *r* here? _____
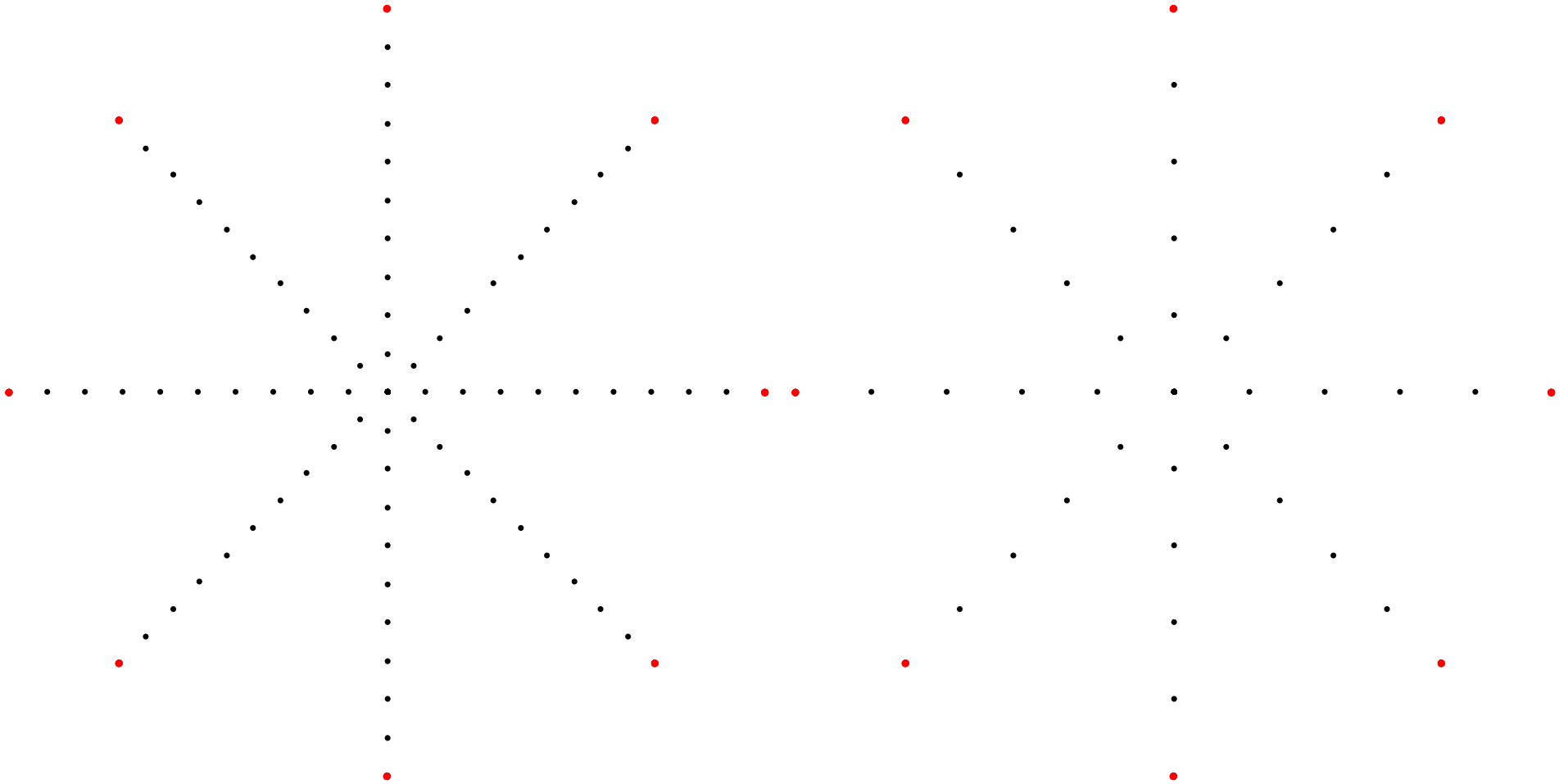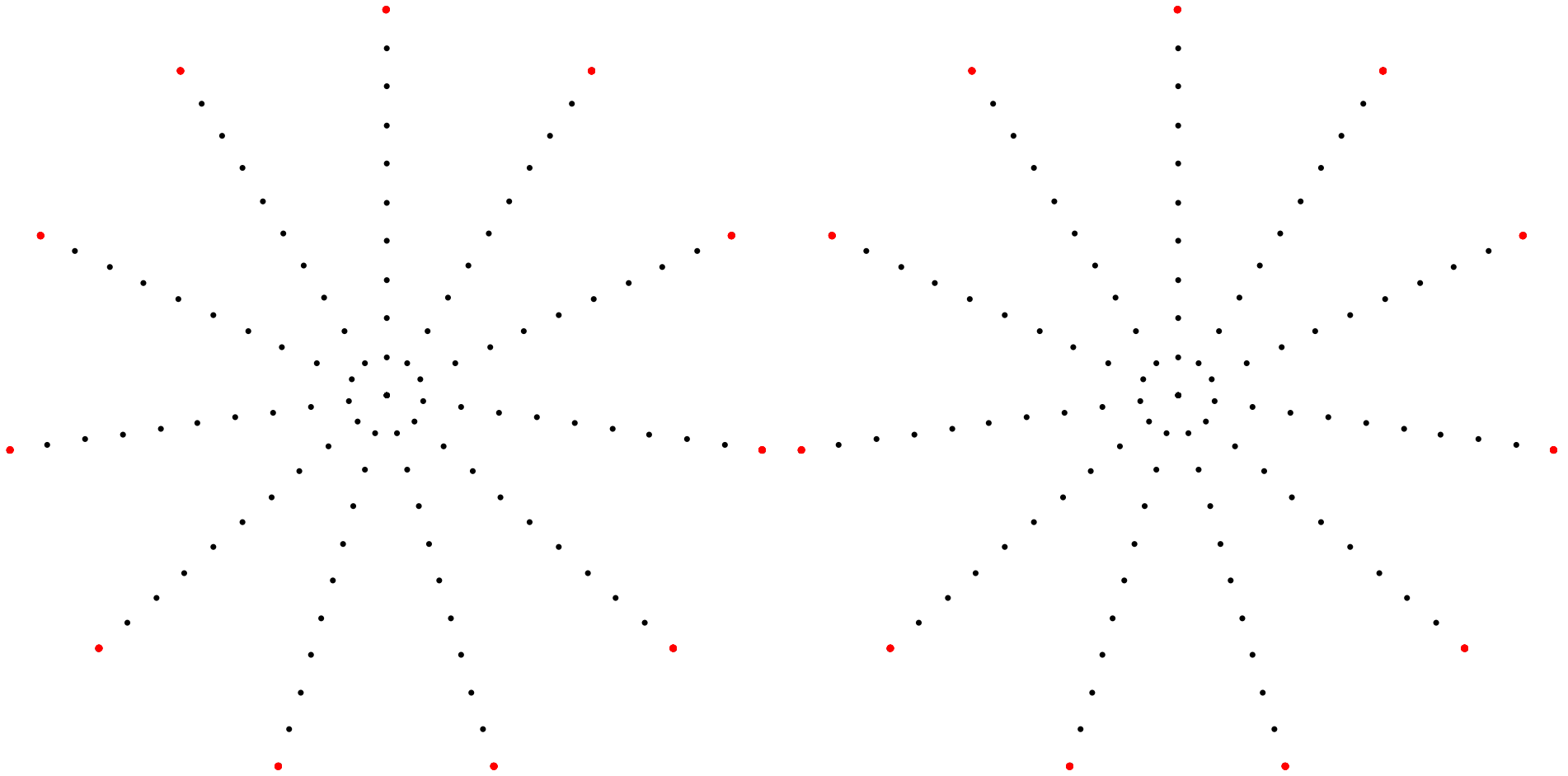
Varying the number of vertex jumps, *J*, between vertices of the parent polygon (SIDE A)

Both images are based on *n* = 11. The number jumps between vertices, J produces different images. Choose two value of jumps (between 1 and 5), one for each image. Start at the top and move in one dot each time you move to the next vertex ray. In 10 lines you will have the completed figure since *r* = 10 for both images.

Jumps for this image _____   Jumps for this image _____

Varying the number of vertex jumps, *J*, between vertices of the parent polygon (SIDE B)

Both images are based on *n* = 11. The number jumps between vertices, J produces different images. Choose two more value of jumps, *J*, between 1 and 5 not used on SIDE A (the reverse side of this page), one for each image. Start at the top and move in one dot each time you move to the next vertex ray. In 10 lines you will have the completed figure.

Jumps for this image _____   Jumps for this image _____