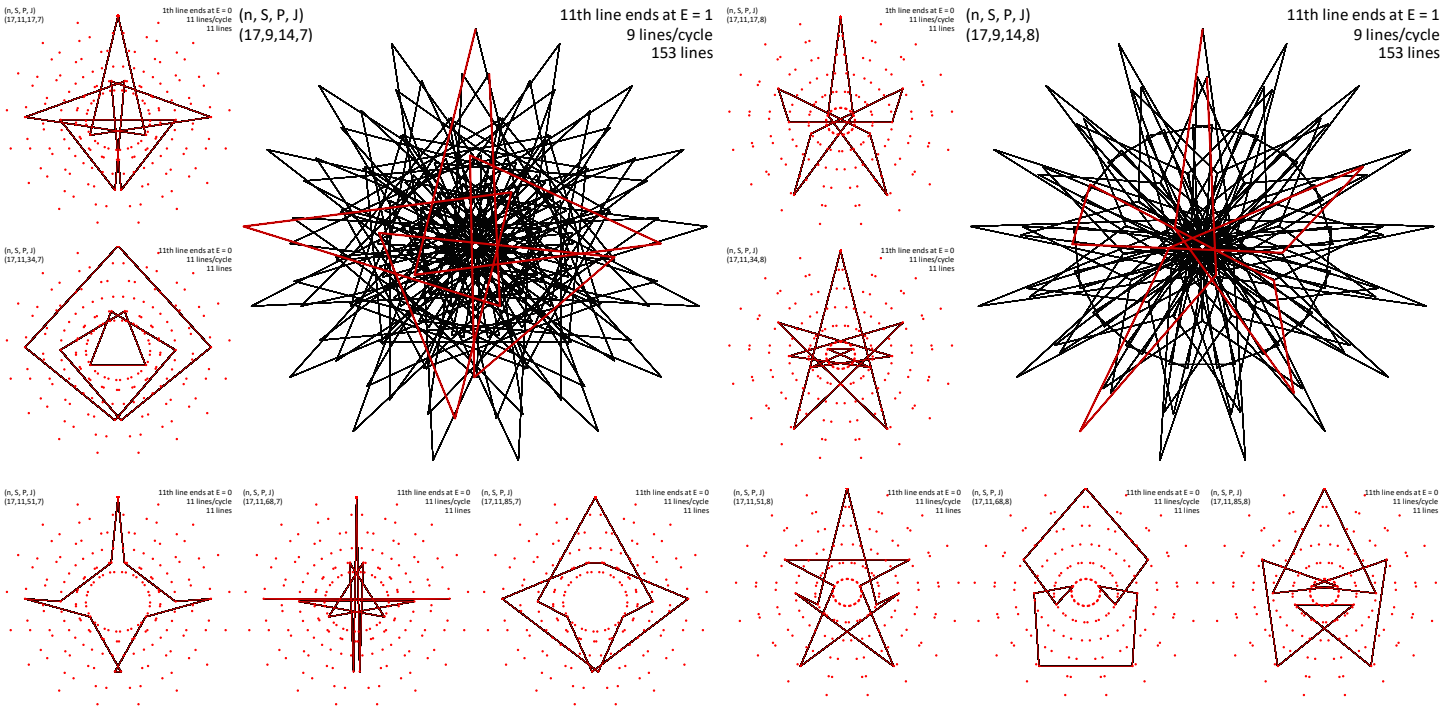
G-Line Images given *G* is Prime

The strategy used in this chapter is easily generalized beyond 7-line single-step images. As noted elsewhere, the *Excel* file is set up to examine ***G***-line *single-step* images using the setup provided in G40:K40 as long as ***P*** in cell G1 uses the equation =J40 rather than =M36.

When ***G*** is a prime number, the image progression is very similar to that produced for ***G*** = 7. The only modifications are that now ***k*** < ***G***/2 rather than 1, 2, 3 for ***G*** = 7. Thus when ***G*** = 11, for example, there are 5 base images for every ***J*** < ***n***/2.

As with ***G*** = 7, when ***J*** is close to ***n***/2, more complex images emerge than ***G***-point stars. Shown below are the ***G*** = 11 base images for ***k*** = 1-5 (1-3 at left, 4,5 below) for ***J*** = 7 and 8 given ***n*** = 17. The larger image is a single step version, given ***k*** = 1.



The ***k*** = 1 *fighter jet* for ***J*** = 7 and *stick man* for ***J*** = 8 are *cracked-open* *single-step* images of length 11 when ***S*** = 9. Note that the base image for ***J*** = 7, ***k*** = 4 is like the 7-line glider so it is not surprising that the bottom left *single-step* version is similar. The bottom right image is *single-step* for ***J*** = 8, ***k*** = 3. Notice that the downward pointing arrow is *overly closed*.