

The 7-Line Generator Function version of the String Art Excel file

When examining images in this chapter, it is helpful to have a file that automates the *P* generation process so that it changes whenever *n*, *S*, *k*, or *J* changes. That way, changing any one of the parameters, changes *P* as well and hence makes exploration more seamless.

Automating Searches for Images in Excel. The *String Art using 7-Line Generator Function* file is a modified version of one of the **ESA** Chapter 10 Excel files. That file was modified to use the spinner in E36:E39 to control *k*, and *P* in E1 is linked to *The 7-Line Generator Function* value of *P* calculated in M36. A screenshot of the dashboard in D25:M41 looks like this.

▲	1 <i>k</i> , multiplication factor for times around the image.	7-line P 37
▼	The 7-Line Generator Function $P = \text{ROUND}(nkS/7,0)$ produce images whose 7th line is close to the top. This works for $k = 1, 2, 3$. Below is a version for G lines.	
Write notes here	10 G	26 G-Line value of P n/J 0.444444444
	If $k=1$ version does not work, try other values of $k < G/2$ (19,19,103,11) is 3SST These are notes from 7gon	1 -1 E, end of Gth line

The green portion at the bottom is some of the unprotected area. Shown here is the setup that you can use if you want to explore G-line images rather than just 7-line images. The equation is set up for $G = 10$ (a 10-gon or 10-gram, for example). To explore this, type =J40 in E1 instead of =M36. The end of the chapter discusses composite G-line images. I have left my notes in the green area so you can see what I did early on in my explorations. At the time, there were two spinners in this area and the file was set to examine partial way around images.