Challenge Questions using the Points sheet: 1. Find values of $\boldsymbol{S}, \boldsymbol{P}, \boldsymbol{J}$, and $\boldsymbol{n}$ that produce each of these images.


Page 2: The top three images can be created by changing just one parameter. Which one and what are $\boldsymbol{S}, \boldsymbol{P}, \boldsymbol{J}$ and $\boldsymbol{n}$ in each image?


The bottom three images are similar to the bottom 3 on Page 1. Can you figure out how they are similar to one another? Provide $\boldsymbol{S}, \boldsymbol{P}, \boldsymbol{J}$ and $\boldsymbol{n}$ for each image


## 3. Read the Odd Needle Stars piece. The end of that piece provides a couple of questions.

Can you find examples of even pointed needle stars? If so, can you determine rules such as those in the Odd Needle Stars piece that produce even point stars?

