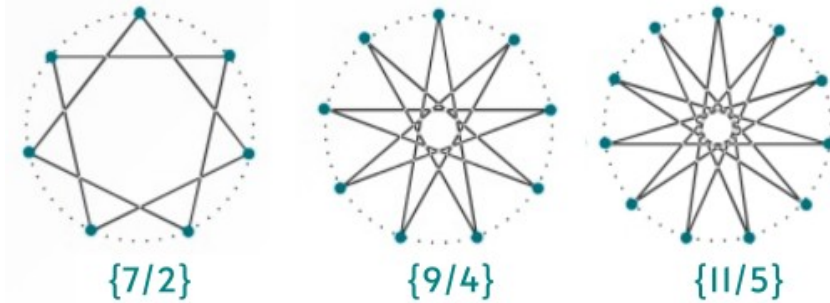


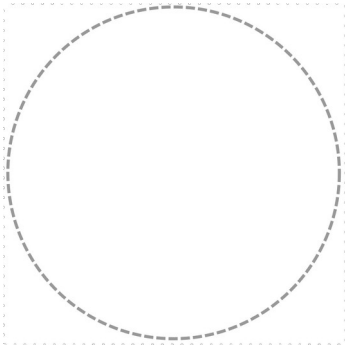
## ☆☆ STAR POLYGONS ☆☆

An  $\{n/m\}$  star polygon is the shape formed by placing  $n$  dots equally spaced around a circle and connecting each one to those  $m$  spaces away. Here are some examples of star polygons:

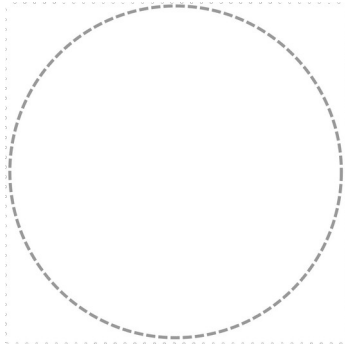


I. Try drawing some star polygons:

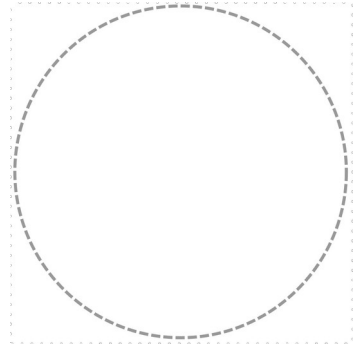
$\{5/3\}$



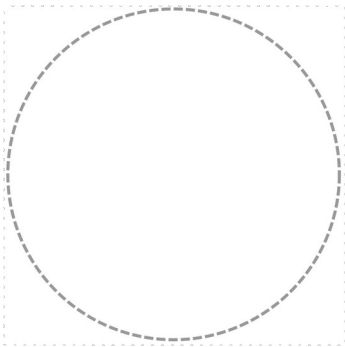
$\{7/3\}$



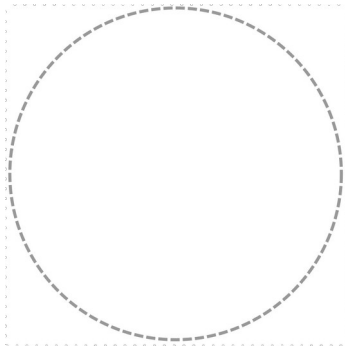
$\{7/4\}$



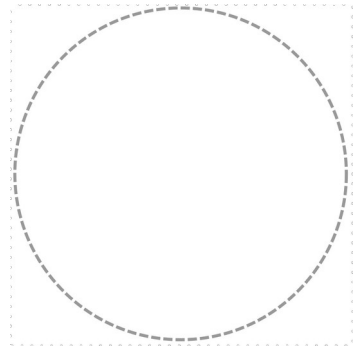
$\{11/3\}$



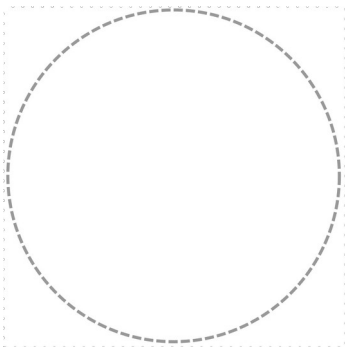
$\{12/5\}$



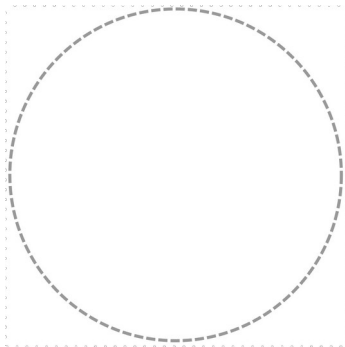
$\{6/2\}$



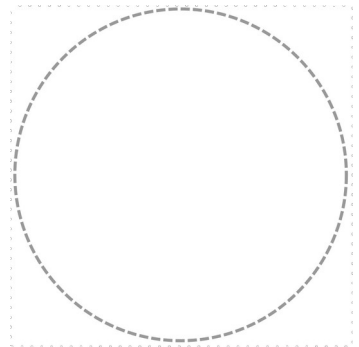
$\{6/3\}$



$\{8/4\}$



$\{8/2\}$



2. Draw some more star polygons of your choice:

{  /  }

{  /  }

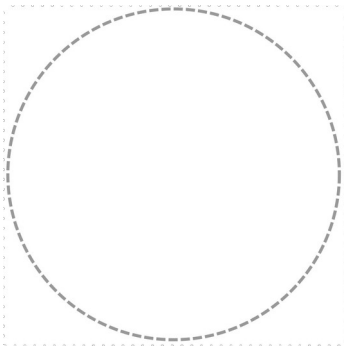
{  /  }

{  /  }

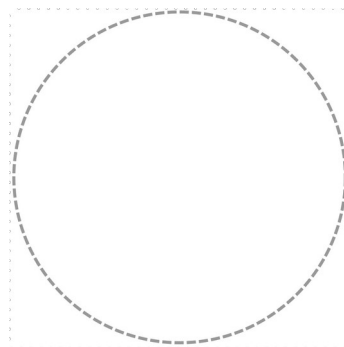
{  /  }

{  /  }

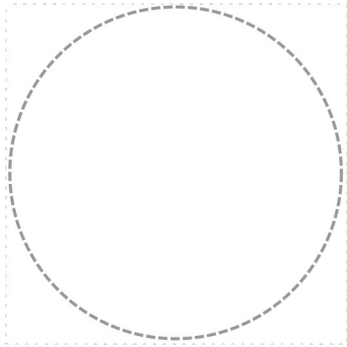
3. What do  $\{2n/n\}$  stars look like? Draw one example.



4. What do  $\{n/1\}$  stars look like? Draw one example.

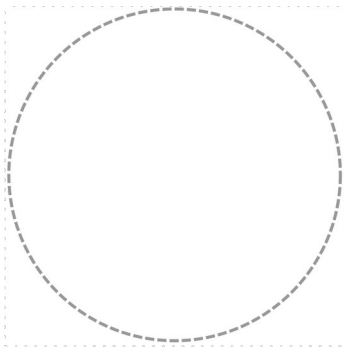


5. What do  $\{n/n\}$  stars look like? Draw one example.

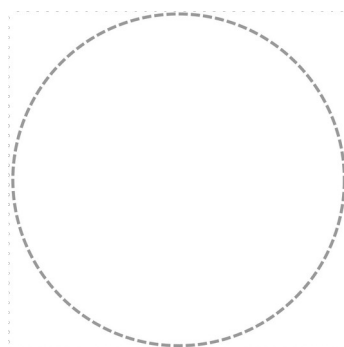


6. Draw a  $\{10/4\}$  star polygon. Notice that it looks like 2  $\{5/2\}$  stars.  
Draw a  $\{12/3\}$  star polygon. What does it look like?

$\{10/4\}$



$\{12/3\}$

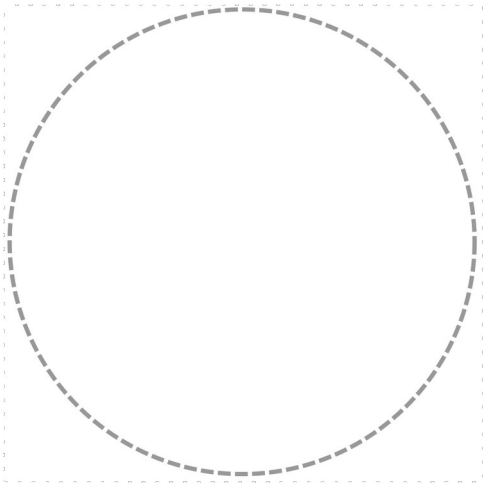


7. Which stars consist of a single drawn line, and which are multiple copies of other stars?

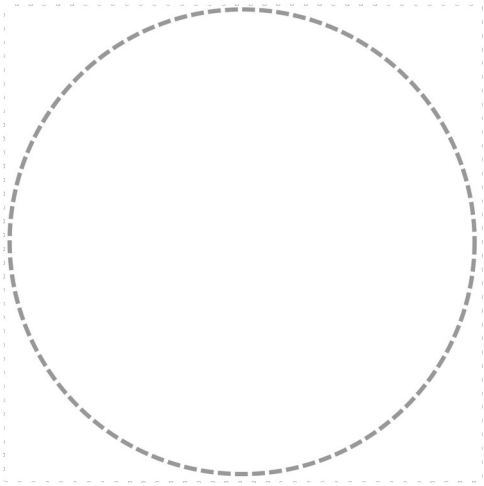
8. What do you think a  $\{24/9\}$  star would look like?

6. What is the sum of all acute angles in a

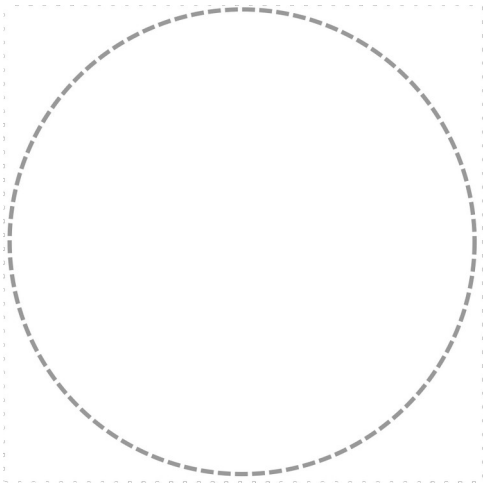
$\{5/2\}$  star?



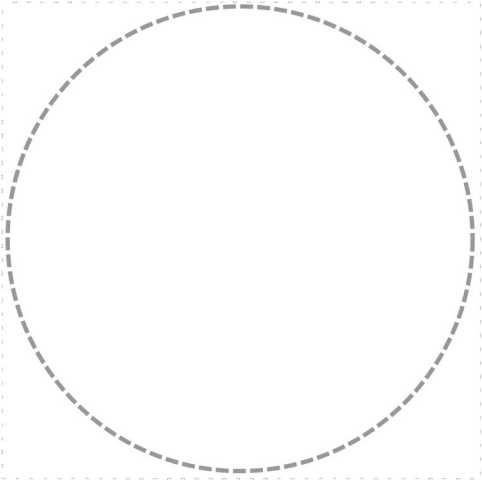
$\{6,2\}$  star?



$\{7,2\}$  star?



$\{8,2\}$  star?



$\{n,2\}$  star?

