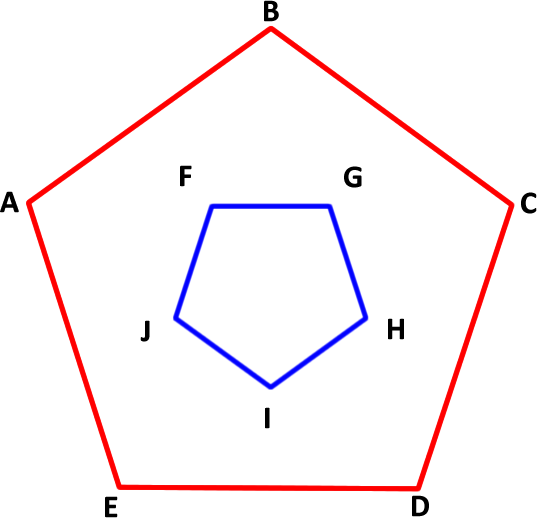
**Let’s work through the following sequence to prepare ourselves for analyzing the 5-Pointed Star.**

|  |  |  |
| --- | --- | --- |
| 1. Identify the measure of ∠ B  RightAngle.png | 2. .Identify the measure of ∠ A.  linearAngle.png | 3. Identify the measure of ∠ C.  SupplementaryAngle.png |
| 4. Identify the measure of ∠ D.  EquliateralD.png | 5. Identify the measure of ∠ E.  EquliateralE.png | 6. What is the **tota**l measure of the *interior* angles of *equilateral* triangle DEF?  EquliateralTriangle.png |
| 7. Identify the measure of ∠ G.  SquareG.png | 8. Identify the measure of ∠ H.  SquareH.png | 9. What is the **total** measure of the interior angles of the *square* GHIJ?  Square.png |
| 1. The TOTAL measure of the interior angles of a polygon with *n* sides is 180\*(*n*-2). Does this result agree with your answers to **Questions 6 and 9** above?  2. If the lengths of all sides of a polygon ere equal then the all the interior angles are equal, too! We call this type of polygon a *regular* polygon! | | |
| 10. What is the **total** measure of all the interior angles of the 5-sided *pentagon* KLMNO?  Pentagon.png | 11. Identify the measure of ∠ K.  PentagonK.png | 12. Identify the measure of the indicated angle.  ExteriorAngle.png |

**We now have enough understanding of *regular* polygons to analyze the 5-Pointed Star.**

13. Consider the inner and outer regular pentagons to the right.

a) What is the measure of ∠ JFG?

b) Draw a straight line from B to F.

c) What is the measure of ∠ BFG?

d) Draw a straight line from B to G.

e) What is the measure of ∠ FGB?

f) What is the measure of ∠ GBF?

g) Draw the remaining lines to create the five-pointed star?

14. a) As you know, each of the 20 scenarios in this *Frozen* Coding Environment asks you to **complete a specific task**.

b) For each task, the programming statements you can choose from are **limited** to those that you would need to be successful.

c) We’re trying to complete a task of **our own design**!

d) I was only able to find **one(!)** scenario that offered the necessary programming statements to complete our 5-Pointed Star.

**Final Task**

15. Select Step 17 and, based on our previous analysis, see if you can develop the code necessary to produce a 5-Pointer Star as shown above right.