Wk5 - Polygon Class - individual

In an n-sided regular polygon, all sides have the same length and all angles have the same degree (the polygon is both equilateral and equiangular). Design, implement and test a class named Polygon that contains:

- An int named n that defines the number of sides in the polygon with default value 3.
- A double named side that stores the length of the side with default value 1.
- A double named x that defines the x-coordinate of the polygon's center with default value 0.
- A double named y that defines the y-coordinate of the polygon's center with default value 0.
- Two constructors:
    - A default constructor that sets values to default values (given above)
    - An overloaded constructor that sets values to those received in parameters.
- Accessor and mutator functions for each variable (get and set).
- The function getPerimeter() that returns the perimeter of the polygon.
- The function getArea() that returns the area of the polygon. (Note: Be careful to find a good formula for this! There are many wrong formulas on the Internet. You're needing the formula for a regular polygon.)

The test file for the class should create 2 different polygons, each using one of the constructors and test all accessor, mutator and calculating functions.

Use inline functions and functions or constructors with default values, where appropriate.