

5.3 AreaCircle

Purpose

AreaCircle exercise reinforces the following concepts:

- Overloading Methods
- Returning values from methods
- **Note:** Do NOT use JOptionPane

Methods Required

1. main
2. distance from section 5.2 in book
3. areaCircle method from book exercise 4.2
4. areaCircle method that takes in 4 parameters

main method

- prompts user for **four integers** that represent
 - the center point on a circle, and
 - another point on the circle
- calls areaCircle method, remembering to pass the parameters (**Note:** create a new variable to hold the value that is returned from your area call)
- prints results

areaCircle method (from 4.2)

- Takes the radius as a parameter and calculates the area
- Adjust the copied method from exercise 4.2 (week 3)
 - Change the print statement to a return
 - Change the void in the method declaration to the variable type you are returning

areaCircle method that takes 4 parameters

- Takes in 4 parameters and calls the distance method to get the radius
- Calls the other areaCircle method and passes the radius as a parameter

distance method

- Copy from book section 5.2
- This method calculates the radius of a circle by using the center point of the circle and another point on the circle