

Implement the methods below.

```
public class Scratchwork
{
    public static void main(String[] args)
    {
        System.out.println(computeAreaRectangle(4, 6));           // 24
        System.out.println(computeCost(3, 9.99));                // 29.97
        System.out.println(computeCostAfterDiscount(10.0, 0.2)); // 8.0
        System.out.println(computeAreaTrapezoid(8, 10, 5));      // 45.0
    } // end of main method

    // precondition - len > 0, wid > 0
    // postcondition - returns the area of a rectangle with length len and width wid
    public static int computeAreaRectangle(int len, int wid)
    {

    } // end of computeAreaRectangle method

    // precondition - numItems >= 0, costPerItem >= 0
    // postcondition - returns the cost of purchasing numItems each with cost of costPerItem
    public static double computeCost(int numItems, double costPerItem)
    {

    } // end of computeCost method

    // precondition - basePrice >= 0, discountRate >= 0
    // postcondition - returns the cost of purchasing single item with a price of basePrice
    // after a discount rate of discountRate is applied
    public static double computeCostAfterDiscount(double basePrice, double discountRate)
    {

    } // end of computeCostAfterDiscount method

    // precondition - base >= 0, height >= 0
    // postcondition - return the area of a trapezoid with base measurements of base1
    // and base2 and a height of height
    public static double computeAreaTrapezoid(int base1, int base2, int height)
    {

    } // end of computeAreaTrapezoid method
} // end of class
```