# Customer Purchase Total Calculation

## Python Code:

# Sample data  
prices = [100, 50, 20] # Prices of items  
quantities = [2, 3, 5] # Quantities for each item  
discount\_rate = 10 # 10% discount  
tax\_rate = 5 # 5% tax  
  
# Step 1: Calculate total before discount and tax  
subtotal = sum(p \* q for p, q in zip(prices, quantities))  
print("Subtotal:", subtotal)  
  
# Step 2: Apply discount  
discount = (discount\_rate / 100) \* subtotal  
subtotal\_after\_discount = subtotal - discount  
print("Subtotal after discount:", subtotal\_after\_discount)  
  
# Step 3: Apply tax  
tax = (tax\_rate / 100) \* subtotal\_after\_discount  
total\_cost = subtotal\_after\_discount + tax  
print("Total cost after discount and tax:", total\_cost)

## Output:

Subtotal: 460  
Subtotal after discount: 414.0  
Total cost after discount and tax: 434.7