SUCCESS CENTER PRACTICE SHEET
Economics 201
Calculating CPI

Step 1: Calculate each year's market basket. To find the market basket, multiply each year's price to the base year's quantities.

Step 2: Consider the results in order to better understand base year and current year's information.

2011 (base year)

Item	Price	Quantity
peaches	$0.80	60
haircuts	$10.00	40

2012

Item	Price	Quantity
peaches	$0.90	65
haircuts	$10.87	50

Step 3: Use the appropriate formula in order to determine each year's CPI.

Step 4: Calculate the inflation or deflation rate.

Solutions:

Step 1:

2011 (base year)

Item	Price	Quantity		
peaches	$0.80	60	=	$48.00
haircuts	$10.00	40	=	$400.00
				$448.00

2012

Item	Price	Quantity		
peaches	$0.90	**60**	=	$54.00
haircuts	$10.87	**40**	=	$434.80
				$488.80

Step 2:

The cost of peaches increased by $0.10 and the cost of a haircut increased by $0.05. Quantities of items changed, oranges = 55, haircuts = 38, but current year's quantities are not considered.

Step 3:

$$\text{CPI 2011} = \frac{\text{Cost of CPI market basket at current year prices}}{\text{Cost of CPI market basket at base year prices}} * 100$$

$$= \frac{\$448.00}{\$448.00} = 1 \quad * 100$$

$$\text{CPI 2011} = 100.0$$

$$\text{CPI 2012} = \frac{\text{Cost of CPI market basket at current year prices}}{\text{Cost of CPI market basket at base year prices}} * 100$$

$$= \frac{\$488.80}{\$448.00} = 1.091071 \quad * 100$$

$$\text{CPI 2012} = 109.1$$

Step 4:

$$\text{Inflation rate} = \frac{\text{CPI in current year - CPI in previous year}}{\text{CPI in previous year}} * 100$$

$$= \frac{(109.1 - 100.0)}{100}$$

$$\text{Inflation rate} = 9.1\%$$