Macro Module 1 Implicit price deflator practice exam questions

(The attached PDF file has better formatting.)

A country makes goods Y and Z in Years 1 and 2 at the quantities and prices shown below. The implicit price deflator in Year 1 is 137.

	Year 1		Year 2	
	Y	Z	Y	Z
Quantity	55	151	77	130
Price	120	28	152	89

Use the chain-link method for the base prices.

Question 1.2: Nominal GDP

What is the nominal GDP in Year 1 and in Year 2?

- Year 1: 55 × 120 + 151 × 28 = 10,828
- Year 2: 77 × 152 + 130 × 89 = 23,274

Question 1.3: Base prices

What are the base prices for Good Y and for Good Z?

- Good Y: (120 + 152) / 2 = 136.00
- Good Z: (28 + 89) / 2 = 58.50

Question 1.4: GDP at base prices

What is the GDP in Year 1 and in Year 2 at the base prices?

- Year 1: 55 × 136 + 151 × 58.50 = 16,313.50
- Year 2: 77 × 136 + 130 × 58.50 = 18,077.00

Question 1.5: Ratio of GDP in Year 2 to Year 1

What is the ratio real GDP in Year 2 to real GDP in Year 1?

Answer 1.5: 18,077.00 / 16,313.50 = 1.1081

Question 1.6: Real GDP

What is Real GDP in Year 1?

Answer 1.6: 10,828 / (137 / 100) = 7,903.65

Question 1.7: Real GDP

What is Real GDP in Year 2?

Answer 1.7: 7,903.65 × 1.1081 = 8,758.03

Question 1.8: Implicit price deflator

What is the implicit price deflator in Year 2?

Answer 1.8: 100 × 23,274 / 8,758.03 = 265.74