

Question 1: Score 0/1

Suppose that in the year 1,954 a bottle of pop cost 12 cents. What is the equivalent cost in 2,005? Give your answer in dollars, and give two decimal digits of precision.



Your Answer:

Correct Answer: 0.871227±0.01

Question 2: Score 0/1

Bob earned 21,500 dollars in the year 1,993. What is that equivalent to in 2,005? Give two decimal digits of precision.



Your Answer:

Correct Answer: 29,058.4775±0.01

Question 3: Score 0/1

What was the inflation rate from the year 1,983 to 1,984? Give your answer as a percentage, with one decimal digit of precision. Remember you shouldn't include the word "percent" or the percent sign.



Your Answer:

Correct Answer: 4.317269±0.1

Question 4: Score 0/1

A toy that cost 7.3 dollars in the year 1,992 has increased in price at the same rate as the CPI. What would it cost in 2,005? Give two decimal digits of precision.



Your Answer:

Correct Answer: 10.161725±0.01

Question 5: Score 0/1

A bottle of pop in a vending machine cost 0.6 dollars in the year 1,998. What is the CPI-equivalent price for that bottle of pop in 1,955? (We usually don't take prices back in time like this, but trying to do it will help you understand bringing prices forward in time.) Give two decimal digits of precision.



Your Answer:

Correct Answer: 0.09865±0.01

Question 6: Score 0/1

In the year 2,005, you could buy a pretty good computer for 1,000 dollars. According to the CPI, what is that price equivalent to in 1,986? (We usually don't take prices back in time like this, but trying to do it will help you understand bringing prices forward in time.) Give two decimal digits of precision.



Your Answer:

Correct Answer: 561.187916±0.01

Question 7: Score 0/1

In the year 1,978, a good scientific calculator cost 80 dollars. Use the CPI to find the equivalent of this price in year 2,005 dollars. Give two decimal digits of precision.



Your Answer:

Correct Answer: 239.631902±0.01

Question 8: Score 0/1

What was the inflation rate from the year 1,995 to 1,996? Give your answer as a percentage, with one decimal digit of precision. Remember you shouldn't include the word "percent" or the percent sign.



Your Answer:

Correct Answer: 2.952756±0.1

Question 9: Score 0/1

Dr. Percy Julian was the second-ever African American PhD chemist. In the year 1,936 he was offered a salary of roughly 4,800 dollars as a research director at Glidden Paints, soybean division (after being rejected from various other companies because of his race). One might wonder: was this salary reasonable, or was it artificially low? Using the CPI, compute the equivalent salary in the year 2,005. The CPI in 1,936 was 13.9. You may round to the nearest integer. You may judge for yourself whether this seems like a reasonable salary.



(Once hired, he did some side projects and ended up inventing economical ways of producing hormones that helped prevent premature births and arthritis.)

Your Answer:

Correct Answer: 67,441.7266±1

Question 10: Score 0/2

Tuition at Acme University rose from 2,850 dollars in the year 1,982 to 5,550 dollars in the year 2,005. Compare the relative change in the price of tuition to the change in the CPI over the same time period:

(a)

How much, in percent, did tuition rise? You may round to the nearest integer percent.



Your Answer:

Correct Answer: 94.736842±1

(b)

How much, in percent, did the CPI rise? You may round to the nearest integer percent.



Your Answer:

Correct Answer: 102.38342±1

Question 11: Score 0/1

What was the inflation rate from the year 1,926 (when the CPI was 17.7) to 1,927 (when the CPI was 17.4)? If your answer is negative, then type it in that way. Give your answer as a percentage, with one decimal digit of precision.



Your Answer:

Correct Answer: -1.694915±0.1

Question 12: Score 0/1

The CPI in the year 2,006 was 201.6, and in 2,007 was 208.1 (this may be different than what the textbook has as an estimate; use the value given here.) Thus, the inflation rate was 3.224206 percent. If the same inflation rate happens for the next year, what will the CPI be in the year 2,008? Give one decimal digit of precision.



Your Answer:

Correct Answer: 214.809573±0.1

Question 13: Score 0/3

Suppose that the police budget in the year 2,005 was 11 million dollars, and for the next year it increased to 11.47 million dollars.

(a)

What was the nominal percent increase in the budget, as a percent? Give two decimal digits of precision.



Your Answer:

Correct Answer: 4.272727±0.01

(b)

If the budget had increased exactly with inflation, what would it have been? Give your answer in millions of dollars, with two decimal digits of precision (e.g. 13.49 or 103.24), but as usual don't type any words (like "million dollars").



Your Answer:

Correct Answer: 11.354839±0.01

(c)

What was the real percent increase in the budget? Give two decimal digits of precision.



Your Answer:

Correct Answer: 1.014205±0.01
