

Name _____

Andrew L. H. Parkes, Ph. D.
Macroeconomics 285 SS18

Answer
KEY
Quiz 4
5 points

Show all of your work.
2015 is the base year.

In 2015, tuition costs \$1100 per term and you go to school for three terms (fall, spring and summer). Your rent is \$950 per month in 2015 which is paid twelve times, you buy 36 DVDs during the year at \$15 each, and you make 30 trips to the grocery store at \$65 per trip.

In 2016, tuition costs \$1160 so you skip the summer session (i.e. two terms). Rent is \$965 per month in 2016 but only nine months have to be paid, you buy 25 DVDs during the year at \$13 each, and you make 20 trips to the grocery store at a cost of \$75 per trip.

- a. What is nominal GDP (aggregate output) for 2016? (1 pt.)

$$= (1160 \times 2) + (965 \times 9) + (13 \times 25) + (75 \times 20) \\ = \$12,830$$

- b. What is the adjusted-for-inflation product level for 2016? (i.e. Real GDP) (1 pt.)

$$= (1100 \times 2) + (950 \times 9) + (15 \times 25) + (65 \times 20) \\ = \$12,425$$

- c. Calculate the implicit price (GDP) deflator for 2016. (1 pt)

$$\frac{N \text{ GDP}}{R \text{ GDP}} = \frac{\$12,830}{\$12,425} = 1.03$$

- d. Calculate the CPI for 2016. (1 pt)

$$CPI_{2016} = \frac{17,778}{17,190} = \underline{\underline{103.4}}$$

- e. Calculate the inflation rate for 2016. (1 pt)

$$\frac{103.4 - 100}{100} \times 100\% = \boxed{3.4\%}$$