

NAME \_\_\_\_\_

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ECON 104.5

Spring 2015

**Date Due:** Thurs, March 19

**HOMEWORK 3**

This assignment (24 points) is due **at the beginning of class on Thursday, March 19.** After the assignment is collected, we will go over it.

You can work together; however, you are expected to write up your answers individually. If you cannot make it to class on 3/19, send your homework with a friend or turn it in early during office hours with your name and section time clearly marked. (Note: We will not accept assignments that are sent via email. **No late assignments will be accepted.**)

1. Please review your packet notes, pages 59 – 102, readings that correspond to your packet notes: text chapters 9 and 10 (relevant pages are indicated in the packet), and Section III of your packet, pages 186 – 189 and 196 – 208.
2. (5 points) Consumers in the Northland economy consume three goods: spears, longboats and shields. The prices of each of these goods over the last 3 years have been:

The Economy of Northland

	2012	2013	2014
	Price (\$)	Price (\$)	Price (\$)
Spears	10	12	14
Long Boats	200	220	220
Shields	15	15	17

- a. If the average household basket contains 20 spears, 1 longboat, and 30 shields per year and the base year is 2013, find Northland's CPI for 2012, 2013 and 2014. (Use a calculator and show your work in the space provided below.)

Year	Spears (P * Q)	Longboats (P * Q)	Shields (P * Q)	\$ Cost of Basket	CPI
2012					
2013					
2014					

- b. Using your table above, calculate the rate of inflation for 2013 and 2014. (Use a calculator and show your work below.)

$$\pi_{2013} =$$

$$\pi_{2014} =$$

3. (3 points) Professor Bell's earnings for 1970, 1980 and 1990 along with the CPI for each year are shown in the table below. Please calculate her real income for each year. (Use a calculator and show your work in the space provided.)

Year	Salary (\$)	CPI	Real Income (\$)
1970	\$12,000	40	
1980	\$24,000	60	
1990	\$36,000	100	

In real terms, the Professor's income was the highest in 19\_\_ and the lowest in 19\_\_.

4. (5 points) At the end of 2001, Stan borrowed \$1,000 from PNC bank for one year at the nominal interest rate of 10%. Suppose the price level went up by 15% during 2002.

a. Assuming the base year is 2001, what is the CPI for 2002? (Hint: Write down the formula for calculating the rate of inflation for 2002. Fill in the CPI for 2001 and solve for the CPI for 2002.)

b. Using the CPI for 2002, calculate the real value of Stan's repayment (principal plus interest) to PNC bank. (Use a calculator and show your work below.)

c. Stan's repayment gave PNC bank more / less (circle one) purchasing power than it originally loaned him.

5. (6 points) Please go to the class Web site in ANGEL and read "U.S. Adds Jobs at Steady Clip" article dated 3/6/15 (see Articles folder). Please fill in the blank or circle the correct answer:

**New Jobs:** The number of new jobs created in February was \_\_\_\_\_. This number was greater / less (circle one) than expectations of economists that were surveyed. Hiring was strong / weak (circle one) across most industries.

**Unemployment:** The unemployment rate rose / fell (circle one) to \_\_\_\_\_ percent, while the U6 unemployment rate rose / fell (circle one) to \_\_\_\_\_ percent in February.

**Wages, Participation Rate:** Slack remains in the labor market; wages were up (only) \_\_\_\_\_ percent. The labor force participation rate fell / rose (circle one) to \_\_\_\_\_ percent in February from January. The figure is near the highest / lowest (circle one) level since the late 1970s.

**Federal Reserve's Janet Yellen commented:** cyclical strength / weakness (circle one) persists.