

## BUTCHER-BUSINESS MATH A – 8<sup>TH</sup> PERIOD – OFF-SITE LEARNING PACKET DAY 9

### State Indicator/Competency:

1. Calculate expected values and use them to solve problems.

### Instructional Objective(s):

#### **8.6b Economic Statistics**

1. Students will be able to analyze unemployment data with 80% accuracy.

### Instructions:

1. Read through lesson and examples.
2. If able, watch suggested videos for extra instruction.
3. Complete the practice problems. Check your answers to see how you're doing.
4. Complete attached worksheet. Show your work. Worksheet will be collected and graded.
5. Questions? Contact me by email. [butcherna@mwood.cc](mailto:butcherna@mwood.cc)

### Activities:

#### **Unemployment Rate**

The unemployment rate tells the percentage of the total labor force that is not working. The labor force consists of all people who are of working age and who either have a job or are looking for a job.

The table shows the unemployment rate for different persons for one month as estimated by the U.S. Department of Labor.

Watch this video to learn more about how the unemployment rate is determined:

<https://www.youtube.com/watch?v=uPRQnQxsl3E> (copy/paste URL into your browser)

April 2008 Unemployment Rates by Age, Sex, and Race	
Worker Classification	Unemployment Rate
All	4.9
Teen	16.8
Men	4.4
Women	4.3
White	4.4
Black or African American	8.8
Hispanic or Latin ethnicity	6.5

Example:

1. Which workers shown in the table above had the highest rate of unemployment? What was the rate?

Teens: 16.8%

2. Refer to the table above to find the workers with the lowest unemployment rate. What was the rate?

Women: 4.3%

3. What was the difference in the unemployment rate between teens and All workers in 2008?

Teens: 16.8%

All: 4.9%

$$16.8 - 4.9 = 11.9\%$$

**FYI: Law of Statistics:**

There is one Law of Statistics which states: If the statistics do not support your viewpoint, you obviously need more statistics. What does this statement mean?

The Law of Statistics tells consumers to be wary of the statistics they hear or read. Almost any viewpoint can be supported by statistics. Individuals, business firms, labor unions, non-profit organizations, and all levels of government use statistics that support their position and ignore those that do not. To believe the statistics used by others, you need to know how the data were collected and analyzed to determine their truthfulness.

**Practice:**

1. What was the difference in the unemployment rate of male and female workers in the data shown?

(Answer: 0.1%)

**Assignment:** 8.6b Unemployment rate worksheet (10 pts)

8.6b Unemployment

Name: \_\_\_\_\_ Pd: \_\_\_\_\_

Use the unemployment table below to solve:

April 2008 Unemployment Rates by Age, Sex, and Race	
Worker Classification	Unemployment Rate
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Teen	16.8
Men	4.4
Women	4.3
White	4.4
Black or African American	8.8
Hispanic or Latin ethnicity	6.5

1. Which workers shown in the table had the second highest rate of unemployment? What was the rate?
  
2. What was the difference in the unemployment rate for each pair of groups?
  - a. teens and men workers
  
  - b. Hispanic and Latin ethnicity and white workers
  
  - c. men and women
  
  - d. all and Black or African American
  
3. On the internet, find the total unemployment rate for 2019. Find the rate for men in 2019 and women in 2019. What is higher and by how much?