

Questions 1-6. The table below represents the monthly unemployment rates in the US from January of 2005 through May of 2016.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005	5.3%	5.4%	5.2%	5.2%	5.1%	5.0%	5.0%	4.9%	5.0%	5.0%	5.0%	4.9%
2006	4.7%	4.8%	4.7%	4.7%	4.6%	4.6%	4.7%	4.7%	4.5%	4.4%	4.5%	4.4%
2007	4.6%	4.5%	4.4%	4.5%	4.4%	4.6%	4.7%	4.6%	4.7%	4.7%	4.7%	5.0%
2008	5.0%	4.9%	5.1%	5.0%	5.4%	5.6%	5.8%	6.1%	6.1%	6.5%	6.8%	7.3%
2009	7.8%	8.3%	8.7%	9.0%	9.4%	9.5%	9.5%	9.6%	9.8%	10.0%	9.9%	9.9%
2010	9.7%	9.8%	9.9%	9.9%	9.6%	9.4%	9.5%	9.5%	9.5%	9.5%	9.8%	9.4%
2011	9.1%	9.0%	9.0%	9.1%	9.0%	9.1%	9.0%	9.0%	9.0%	8.8%	8.6%	8.5%
2012	8.2%	8.3%	8.2%	8.2%	8.2%	8.2%	8.2%	8.1%	7.8%	7.8%	7.8%	7.9%
2013	7.9%	7.7%	7.5%	7.5%	7.5%	7.5%	7.3%	7.2%	7.2%	7.2%	7.0%	6.7%
2014	6.6%	6.7%	6.6%	6.2%	6.3%	6.1%	6.2%	6.1%	5.9%	5.7%	5.8%	5.6%
2015	5.7%	5.5%	5.5%	5.4%	5.5%	5.3%	5.3%	5.1%	5.1%	5.0%	5.0%	5.0%
2016	4.9%	4.9%	5.0%	5.0%	4.7%							

<http://data.bls.gov/timeseries/LNS14000000>

1. Find the relative change in unemployment from January 2005 to December of 2015. (enter a percent rounded to the nearest hundredth)
2. Find the absolute change in the unemployment rate during 2015 (from Jan 15 to Dec 15). (round to the tenths place)
3. Find the relative change in the unemployment rate during 2015. (enter a percent rounded to the nearest hundredth)
4. Find the absolute change in the unemployment rate during 2008. (round to the tenths place)
5. Find the relative change in the unemployment rate during 2008. (enter a percent rounded to the nearest hundredth)
6. Write a sentence reporting on the unemployment rate for 2008 using the values calculated in the previous questions.

Questions 7-8. Your friend’s office is having a weight loss contest, the winner will get \$100. The participants’ weights are in the table below:

Name	Start	Finish	Absolute	Relative
Jenny	145 lbs	120 lbs		
Dave	310 lbs	260 lbs		
Phil	230 lbs	180 lbs		
Mary	120 lbs	99 lbs		

- Find the absolute and relative changes for the participants. Fill your answers in the table. (enter the relative change column as a percent rounded to the hundredths place)
- Who do you believe should get the \$100, explain why.

Questions 9-11. The fair market rental rate for Bloomington is \$747 and for Kokomo is \$654.

- Find the relative change when comparing Bloomington to Kokomo. (enter a percent rounded to the hundredths place)
- Find the relative change when comparing Kokomo to Bloomington. (enter a percent rounded to the hundredths place)
- Write 2 sentences describing the difference in rent between Kokomo to Bloomington.
- The table shows the inflation-adjusted annual income per person in 1990 and 2011 for each listed country. Which country had the smallest relative increase in annual income per person from 1990 to 2011? What was the smallest relative increase?

	1990	2011
Country A	\$33,304	\$41,451
Country B	\$23,036	\$30,829
Country C	\$1,986	\$7,656
Country D	\$893	\$1,140

Country _____ had the smallest relative increase in annual income per person from 1990 to 2011. It was about _____%. (Round to the nearest tenth as needed.)

13. Employees at a certain company currently have to pay 3% of their health care costs, while the company pays the rest. Next year, however, employees will have to pay 6% of their health care costs. Express the change as an absolute change (in percentage points) and a relative change.

The absolute change is _____ percentage points.

The relative change is _____%.