

ECONOMICS

Show all work. Failure to show work will result in points being taken off.

1. Automobile insurance policies (contracts) typically are issued every 6 months. Consider an actual case during the tail part of 2018 where a policy was worth approximately \$649. In March of 2019 the issued policy is projected to be approximately \$700. Note that these costs are somewhat high. What is the rate of inflation in these policies over this time period?
2. Los Angeles, CA and Atlanta, GA (ATL baby!!!) are two of the most well-known cities in the U.S. These cities are also very large (with LA being the larger of the two). Given that the number of people in the labor force was 6,827,958 (LA) and 3,097,603 (ATL), and the number of people out of work for Atlanta was 110,713 and for LA was 285,764, what was the rates of unemployment for these two cities for December 2018?
3. Here are some data for numbers of people in the labor force for some cities in the U.S.: Columbia, SC (400,750); Jacksonville, FL (775,809); Charlotte, NC (1,343,634), and Charleston, SC (379,429). What are the unemployment rates for these cities if the numbers of people out of work in these cities are 46,012 (Charlotte); 24,070 (Jacksonville); 10,588 (Charleston); and 12,379 (Columbia)?
4. The price of bonds (for your child's education) have gone from \$95.1797 to \$99.9766. What is the rate of inflation?
5. Mortgage interest rates in the U.S. went from 4.37% to 4.38% from 2018-19. What is the rate of inflation?
6. On Friday (2/22/19) the world price of Brent Crude (oil) was \$67.73 a barrel. On Monday (2/25/19) it was \$64.72. Calculate the rate of increase in the price of oil over this very brief time period. What is this result called?
7. Ventilators are used to help people to breath when they have respiratory problems. Before the COVID - 19 outbreak, ventilators were \$20,000 a unit. Now these devices are \$50,000 a unit. Calculate the rate of inflation on these units since the COVID outbreak.
8. Similar to the price gouging that is currently taking place with ventilators, medical masks are also being highly over priced now. Before the COVID -19 outbreak, medical masks were roughly \$7 a box. They are now reportedly going for \$49 a box. In some very extreme cases they are going for approximately \$100 a box. Calculate the rate of inflation for medical masks using both the original price and the two new prices.

NOTE: FOR THE UNEMPLOYMENT PROBLEMS IN 2) AND 3), THERE ARE MULTIPLE CALCULATIONS FOR BOTH PROBLEMS. LOOK FOR THE NUMBER OF PEOPLE OUT OF WORK AND THE THE NUMBER OF PEOPLE IN THE LABOR FORCE. THOSE ARE THE TWO PIECES OF INFORMATION THAT YOU NEED TO DO THE UNEMPLOYMENT PROBLEMS.

