

Homework 1

This homework is due on Jan. 23, 2024 at 11:00pm. Please submit as a pdf file on Canvas.

Problem 1: (8 pts) Demonstrate basic command of Quarto document editing by creating a bulleted list with three items, a numbered list with three items, and a sentence that has one word in bold and one word in italics.

Your text goes here.

Problem 2: (6 pts) The economics dataset contains various time series data from the US economy:

```
economics
```

```
# A tibble: 574 × 6
  date      pce    pop psavert uempmed unemploy
<date>    <dbl> <dbl>   <dbl>   <dbl>   <dbl>
1 1967-07-01 507. 198712    12.6     4.5    2944
2 1967-08-01 510. 198911    12.6     4.7    2945
3 1967-09-01 516. 199113    11.9     4.6    2958
4 1967-10-01 512. 199311    12.9     4.9    3143
5 1967-11-01 517. 199498    12.8     4.7    3066
6 1967-12-01 525. 199657    11.8     4.8    3018
7 1968-01-01 531. 199808    11.7     5.1    2878
8 1968-02-01 534. 199920    12.3     4.5    3001
9 1968-03-01 544. 200056    11.7     4.1    2877
10 1968-04-01 544 200208    12.3     4.6    2709
# i 564 more rows
```

Use ggplot to make a line plot of the total population (pop, in thousands) versus time (column date).

```
# your code goes here
```

Problem 3: (6 pts) Again using the economics dataset, now make a scatter plot (using `geom_point()`) of the number of unemployed versus the total population (pop), and color points by date.

```
# your code goes here
```