

Homework 1

This homework is due on Jan. 23, 2025 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
```