

MTH 154 Homework #2 Key

1. Fri + Sat + Sun = 3 days 1 week = 7 days

$$\frac{3}{7} = 42.86\%$$

if we assume traffic levels are the same, this would not appear to be surprising at all. However, if we knew that there were fewer cars on the road on these days, then that would support the claim that this # is high.

2. $\frac{1,136}{114,370} = .00993...$ or 1% roughly. not 10%.

3. $43,569,000 - 24,975,000 = 18,594,000$

$$\frac{18,594,000}{24,975,000} = .7445$$

or 74%

the population of the US also increased during this time, so while more people are living below the poverty line depending on how much the overall population increased over the same period, this may represent a higher %, no change in % or even a decreased proportion of all Americans.

4. Answers will vary.

5. Answers will vary

6. See attached Excel file

answers will vary

7a. Shows educational attainment (and increases in advanced degrees over time). this is a good choice for this data.

b. Scale is tough but an alternative might be stacked.

c. emphasizes size of populations. might be interesting to see more relative %'s

d. The decline in voting under 45 is really dramatic

e. This is a terrible graph. 3D makes it hard to read and even 2D might be too busy

f. bad graph. pictograms scale by area and are misleading

g. bad graph. avoid perspective. h. too many slices, too hard to read. bad graphs