5.2

A) Proportion

B) Mean

C) Proportion

D) Proportion

E) Mean

5.4

A) 765

B) The proportion of people who cannot cover an unexpected expense of 400$ without getting in debt

C) 322/765 = .420915

D) The variability in a point estimate.

E) SE = 0.017845

F) Yes since the difference is about 8%

G) SE = 0.01771

5.10

A) FALSE since .50 is less than 1 standard error from .52

B) FALSE as we can conclude that 97.6% of all US adult twitter users were included.

C) FALSE we should collect more data as the standard error is inversely proportional to the square root of n

D) False, a larger confidence level always has greater width when everything else is the same.

5.22

A) FALSE since the 95% confidence interval claims that the average waiting time in ER is impossible.

B) TRUE as it lies between the confidence intervals

C) TRUE, since as the confidence level increases the length of the interval becomes wider.