

7 :

(a) $\frac{\text{True } \cancel{\text{yes}}}{\text{yes}} = \frac{1.75}{\sqrt{625}} = 0.07$

(b) $\frac{\text{True } \cancel{\text{yes}}}{\text{yes}} : (\bar{x} - 2SE, \bar{x} + 2SE)$

(c) ~~True~~ False : It does not make sense to estimate "Average household size in the sample"

~~Sample~~ which is already known.
No need to estimate ;

(d) No : Closer to 2 (6 and 2.44) means 2 persons confidence interval is for estimating the population mean !

(e) No same reason as (d).

(f) No household sizes can be only 1, 2, 3, 4, ... they are discrete ~~normal~~ countable.

(g) yes. Central limit theorem