

Homework Solutions

Chapter 10 – Page 647

Exercise 28

- (a) (iii) 11.90 ounces.
- (b) The chart gives us $s = 1.38$ and it also give us the standard error 0.15. Recall that the standard error (SE) is defined to be $\frac{s}{\sqrt{n}}$. So we can set up an equation and solve for n .

$$\begin{aligned}0.15 &= \frac{s}{\sqrt{n}}, \\0.15\sqrt{n} &= s \\ \sqrt{n} &= \frac{s}{0.15} \\ &= \frac{1.38}{0.15} \\ &= 9.2, \\ n^2 &= 9.2^2 \\ &= 84.64.\end{aligned}$$

So the sample size was probably 85, maybe 84.