



## Equitable Equations: *Confidence intervals with the $t$ and $z$*

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### Problem 1

In a survey of 18 adults age 45-54, random individuals were asked how many minutes they spend eating breakfast each day. The results are

24	17	26	33	21	38	24	13	41
17	15	19	12	29	19	24	31	15

Construct a level 99% confidence interval for the population mean.

### Problem 2

Using the built-in `mtcars` data set, which we may view as a random sample of cars, construct a level 95% confidence interval for the mean weight in the population. Assume  $\sigma = 1.2$ .

### Problem 3

In a random sample of 32 chocolate bars, the mean calorie count is 204.0 and the standard deviation is 12.8. Compute a level 95% confidence interval for the population mean.