

Homework 2

Epi 204, Spring 2023

Last modified: 2023-06-05: 6:57:51

1 Standard errors

1.1

Write down the definition of the standard error of an estimator $\hat{\theta}$, using prose (do not use any math symbols other than $\hat{\theta}$ for this sub-section).

Solution:

The standard error of an estimator is the standard deviation of the estimator.

1.2

Write down the definition of the standard error of an estimator $\hat{\theta}$, using mathematical notation.

Solution:

$$\text{se}(\hat{\theta}) = \sqrt{\mathbf{E} \left[(\hat{\theta} - \mathbf{E} [\hat{\theta}])^2 \right]}$$