

**sem option method()** — Specifying method and calculation of VCE

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## Syntax

```
sem ... [ , ... method(method) vce(vcetype) ... ]
```

<i>method</i>	Description
ml	maximum likelihood; the default
mlmv	ml with missing values
adf	asymptotic distribution free

<i>vcetype</i>	Description
oim	observed information matrix; the default
eim	expected information matrix
opg	outer product of gradients
robust	Huber/White/sandwich estimator
cluster <i>clustvar</i>	generalized Huber/White/sandwich estimator
bootstrap [ , <i>bootstrap_options</i> ]	bootstrap estimation
jackknife [ , <i>jackknife_options</i> ]	jackknife estimation

The following combinations of `method()` and `vce()` are allowed:

	oim	eim	opg	robust	cluster	bootstrap	jackknife
ml	x	x	x	x	x	x	x
mlmv	x	x	x	x	x	x	x
adf	x	x				x	x

## Description

`sem option method()` specifies the method used to obtain the estimated parameters.

`sem option vce()` specifies the technique used to obtain the variance–covariance matrix of the estimates (VCE), which includes the reported standard errors.

### Options

`method(method)` specifies the method used to obtain parameter estimates. `method(ml)` is the default.  
`vce(vcetype)` specifies the technique used to obtain the VCE. `vce(oim)` is the default.

### Remarks and examples

[stata.com](https://www.stata.com)

See [\[SEM\] intro 4](#), [\[SEM\] intro 8](#), and [\[SEM\] intro 9](#).

### Also see

- [\[SEM\] sem](#) — Structural equation model estimation command
- [\[SEM\] intro 4](#) — Substantive concepts
- [\[SEM\] intro 8](#) — Robust and clustered standard errors
- [\[SEM\] intro 9](#) — Standard errors, the full story
- [\[SEM\] example 26](#) — Fitting a model with data missing at random