

```
Fixed effects: mathach ~ ses * cvar(ses, school)
              Value Std.Error   DF  t-value p-value
(Intercept)    12.681917 0.3054760 1935  41.51526  0.0000
ses             2.243374 0.2416545 1935   9.28339  0.0000
cvar(ses, school) 3.687892 0.7699000   38   4.79009  0.0000
ses:cvar(ses, school) 0.873953 0.5771829 1935   1.51417  0.1301
```

Sketch the estimated response function as a function of individual ses for a school with mean ses of 0 and for a school with a mean ses of 1. Assume that the range of ses goes from -2 to 2.

Show clearly where each of the linear regression coefficients estimated in the model (12.68, 2.24, 3.69, 0.87) is reflected on the graph.

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Sketch the estimated response function as a function of individual ses for a school with mean ses of 0 and for a school with a mean ses of 1. Assume that the range of ses goes from -2 to 2.

What are estimates of the following:

- i. Within school effect of ses?
- ii. Between school effect of ses?
- iii. Contextual effect of ses?