**ANOVA: Mean squares and the common population variance**

At LLD Records, some of the market research of college students is done during promotions on college campuses, while other market research of college students is done through anonymous mail, phone, internet, and record store questionnaires. In all cases, for each new CD the company solicits an "intent-to-purchase" score from the student, with http://www.phoenix.aleks.com/alekscgi/x/math2htgif.exe/M?3being the lowest score ("no intent to purchase") and http://www.phoenix.aleks.com/alekscgi/x/math2htgif.exe/M?233being the highest score ("full intent to purchase").

The manager finds the following information for http://www.phoenix.aleks.com/alekscgi/x/math2htgif.exe/M?203intent-to-purchase scores for a soon-to-be-released CD:

Group Sample size sample mean sample variance

On campus 26 68.4 87.7

By mail 26 63.5 137.2

By phone 26 62.0 127.3

By internet 26 63.4 67.2

In a store 26 60.1 147.4

|  |
| --- |
|  |

The manager's next step is to conduct a [one-way, independent-samples ANOVA](http://www.phoenix.aleks.com/alekscgi/x/Isl.exe/11JLaECFoEp8oV99cXD8wrY6y-7Du24ehCuy5seDHUbJMSPLFB-HFs0aVR1hGT7suXmGYUtpfnyJ5SRMZnuMsreRBODsE77CE27ImtHtZiSQJ3tol-YR?1zS31ET0N7mAOUaSA4n0VQE8MbneICLscqzlTR1Rf7Zns3QZt9SfBEV0BRWqOb35SSIWJ9SUZBhN71UPZRpr9vwsTfwN9ECdvBjZ7_S_WipPXay) test to decide if there is a difference in the mean intent-to-purchase score for this CD depending on the method of collecting the scores.

Answer the following, carrying your intermediate computations to at least three decimal places and rounding your responses to at least one decimal place.

What is the value of mean square for error (the “within groups” mean square) that would be reported in the ANOVA test? \_\_\_\_

What is the value of the mean square for treatments (the between groups” mean square) that would be reported in the ANOVA test? \_\_\_\_