A psychologist would like to examine the effects of a new drug on the activity level of animals. Three samples of rats are selected with *n* = 5 in each sample. One group gets no drug, one group gets a small dose, and the third group gets a large dose. The psychologist records the activity level for each animal. The data from this experiment are presented below.

|  |  |  |  |
| --- | --- | --- | --- |
| **No drug** | **Small dose** | **Large dose** |  |
| 5 | 5 | 10 |  |
| 3 | 5 | 12 |  |
| 1 | 9 | 9 | *G* = 90 |
| 1 | 6 | 6 | Σ*X*2 = 678 |
| 5 | 5 | 8 |  |
| *T* = 15 | *T* = 30 | *T* = 45 |  |
| SS = 16 | SS = 12 | SS = 20 |  |

(a) Do these data indicate any significant differences among the three groups? Test with *α* = .05.   
1 and conclude that the drug 2 a significant effect on activity level.   
  
(b) Compute *η*2, the percentage of variance accounted for by the treatment. (Round the answer to two decimal places.)   
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