**F test of a multiple regression model**

To help schedule staffing and equipment needs, a large hospital uses a [multiple regression model](http://www.phoenix.aleks.com/alekscgi/x/Isl.exe/1p4GzHJXuHGOuAsdKG2-CQdUZBpi9sexkVTw3iCipTe9rl3GUS6KUilkV6lOkJkmyJi340haHTzceRgNqDAf4OpP-iB34Ei-oeOfbxcvpFZRsj0OkW42?1xdtXQYhwlNpK55MM2ZhSVeJBFbTNak3R02tZsDjhU5QP9v7HWld_EpR_7F2wgRvCdvCaHOiff13dE1Dj78xm8nlaqLSVKfnw2exur30aZLhSLFlabnDLlzx) to predict its 'bed census' , the number of beds occupied at the end of each day. Using hospital records from the most recent days, a total of [independent variables](http://www.phoenix.aleks.com/alekscgi/x/Isl.exe/1nLvDZKbe3_QezJ6IAGQhBlMzWXPEEWoJeiXuHOP0eWHKs8RpCqnpHv52gvQJprAahcUy9MH1mU68xj13akmy1MuXW6UyucQNIPm5h4e0qYNgiSQJZLl?1M3CC6xBZxhiSQC62A-BhpS_u02td-D2ZlyJSKKKLIkr1eC3IAVfdYeluw_IcSjLZxhtx1V8EttVG27Ve34zwZIKPWQZ-odNMJjCHWPb8WOmsdKv6WfvzKPSu) are used to find the estimated regression model. Let denote the coefficients of the variables in this model. A computer printout indicates that the error sum of squares (SSE) associated with the model is and the corresponding regression sum of squares (SSR) is . Using a [significance level](http://www.phoenix.aleks.com/alekscgi/x/Isl.exe/1VANHTn89TzD92ynySoegKtqFXRzWdluchK4ngozdpMk4xiN2GY22gDF-fDDcMLxZl3Mt2RSpWGZEyNJLw4AtkRpGXZMtU3DuFuAql8EdDB1O6qDcTAq?1RUsGLmST3Kk4zlbjcvSllyV3SlQnxd6tR1hv7F0ggRAZMN4gKruFx-a6vWqTqLVTMa5UdMPA1iQC0AiKN233Gw6uTnVBZmq7fwFEYHykTHEdvwyijAFROo) of , can you conclude that at least one of the independent variables in the model provides useful (i.e., statistically significant) information for predicting daily bed census?

Perform a [one-tailed test](http://www.phoenix.aleks.com/alekscgi/x/Isl.exe/1fgdMGDxXGYcXrtGT3ZSvFu0OqaMlKPXL6vA-43M4cxLEuMdQNWRQ4wjIeUcLt9FstmeAba7rccGSUnn0XN5Ayaqa4eeAMec2g851LW64BlKoZmcLj20?14LMsZ6_7ogPlms3-JB_gSlO6BB6eeU0iTH9lMyF5MRvgdxXZiAPlvY8Lqa8cXR7HHOYJxjTzE2aY1066OVFi8ueG4YwwO1qDO7D0fpfrOTfnm1cN). Then fill in the table below.

Carry your intermediate computations to at least three decimal places and round your answers as specified in the table.

The value of the test statistic (round to at least two decimal places)\_\_\_