****

**Linear Algrebra Homework Application:**

**Student Manual**

**For First-Time Users**

[Enter the w](file:///C:\Users\tjenkins01\Downloads\mcs.drury.edu\LinAlgHW)ebsite

The Axiomz development team would like to welcome you to the Linear Algebra Homework system. To sign up, click the “Create Account” dropdown in the top left corner of the home page. After entering your valid credentials, click the “Create” button. If you wish to clear any data you previously had in your text fields, you can click the “Clear” button. After your confirmation of a created account, you can enter your username and password and click the “Sign In” button to log into the matrix.

**What To Do When Logged In**

When you have logged in to the application, click on any uncompleted assignment link in the assignment selection table. The link will take you to a corresponding Question Page, for which the following instructions will allow you to complete a problem which is generated for you in the middle of this Question Page.

**How To Create A Matrix**

1. Go to the dropdown link with the label “Create Matrix” in the Tools pane on the left of your homework page with the system of equations you need to solve
2. Click on the link. A window will appear with two text boxes, with shaded letters inside (“n” and “m”, or n X m for n rows and m columns).
3. Enter the number of rows and columns you want for your matrix in the corresponding text boxes.
4. Click the “Create” button below the text boxes. Your newly created matrix will appear below an arrow pointing to the right.
5. Repeat steps 1-4 if you wish to create another matrix. You can create as many matrices as you need for your work.
6. If you wish to remove any number of matrices or operations in your work before creating your answers, you may click “Remove Last Matrix.” After confirming your wish to remove a matrix to the system the last matrix before your answer will be removed. This allows you to remove any number of answers instead of completely deleting your work if you feel you have a lot of progress that you do not want to destroy.

**Reset Question**

If you want to reset your work of matrices to try a different approach to solving the matrix, click the “Reset Question” link in the tools pane on the left. A confirmation box will appear asking if you wish to reset the question. Hit “OK” and the matrices that you created to solve the problem will be cleared from below the pane with the problem that you must solve.

**How To Create Your Answers**

1. Go to the dropdown link with the label “Answer” in the Tools pane on the left of your homework page with the system of equations you need to solve
2. Click on the link. A window will appear with a single text box, with shaded letters inside (“# of solutions”).
3. Enter the number of solutions you wish to create in response to the system of equations presented in the middle of the page.
4. If you wish to specify a matrix as inconsistent, you can mark the checkbox next to “Inconsistent” instead of generating solutions you can type in.
5. Click the “Create” button below the text box. The solutions for the problem will be appear under the heading “Answer:” with (a) solution variable(s) (X1, X2) below with the text box(s) on the right of the equals sign. Enter your solutions for each corresponding solution variable in each text box. NOTE: If you have marked the answer as inconsistent before hitting the “Create” button, you will simply have a sentence stating: “Answer: The matrix is inconsistent.” In that case, disregard step 6 and proceed to step 7.
6. You can set any of your solutions as free variables. To do so, click the “Set Free Variable” link to the right of a corresponding solution text box. The text box will be shaded and have an “f” inside, and you will not be capable of editing it. Also, the other solution text boxes will become equations for which you must fill in the corresponding coefficients in order to demonstrate how they depend on your free variable. You can make as many free variables as you like after your first, setting the next box to “f”, etc. Please be aware of how the leading equations will depend upon any free variables that you set.
7. You can click “Remove Answers” to remove your solutions if you feel that you need to complete a little more work (complete more operations) before submitting your answer. This often can be a wise choice instead of immediately going to step 8- see the below step for details.
8. Be sure you have filled out every text field in your work and answers! Any solution or piece of work that is “blank” in these mathematical operations must be filled out with a 0. When you are finished, hit the “Submit Answer” button to the bottom right. The page will check your answers. If your solutions are all correct, the page will notify you with a congratulatory message. If any solution is incorrect, the page will prompt you to recheck your answer. If you created one too few or many solutions, the page will prompt you to check that you submitted the correct amount of solutions. NOTE: When you submit your answers and work, you will not be capable of reworking the question. Please give your best effort and complete each problem CAREFULLY!

**Contact Technical Support**

If you have any issues with this homework site, take a screen shot of your error by pressing the PrtScn button, paste it somewhere (such as paint), save it, and contact your instructor.