4. Using MATLAB to solve linear equations
Solving linear systems with MATLAB (External resource)

(1.0 points possible)

The backslash command

To solve a linear system $\mathbf{Ax} = \mathbf{b}$ using MATLAB, type the following:

```
x = A\b
```

Try this by first creating a random 4×4 matrix $\mathbf{A}$, and a random column vector $\mathbf{b}$ with 4 elements.

To create a random $m \times n$ matrix whose entires are random numbers between 0 and 1, use the following MATLAB command.

```
rand(m,n)
```

Your Script

Save Reset MATLAB Documentation (https://www.mathworks.com/help/)

```
1 %create a random 4x4 matrix A (values between 0 and 1)
2 A = rand(4,4) ;
3 %create a random column vector b with 4 entries (values between 0 and 1)
4 b = rand(4,1) ;
5
6 %Solve the linear system Ax=b using the backslash command
7 x = A\b ;
```

Run Script ()

Assessment: Correct

Submit ()

- A defined correctly
- b defined correctly
- Solved for x correctly

Output

```
Code ran without output.
```

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? x=A\b
Why is x=A\b? Should not it be x=(Inverse A) b ? 8

Use rand fucntion
This exercise wants you to use matrix and vector with real, not integer, values in the interval [0,1]. Us... 2

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