Precalculus Quiz Review#1: Spring 2022

Name:

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1. An **consistent system** is one which...

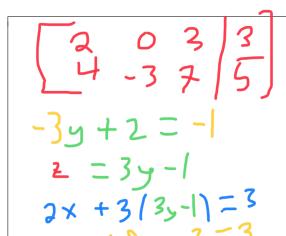
2. A augmented matrix will always contain...

- A. has exactly one solution.
- B. has more than one solutions.
- C. has no solutions
- D. has at least one solution.
- A. one more row than equations in a linear system.
- B. exactly the same number of columns as variables in a linear system.
- C. one more column than variables in a linear system
- D. exactly three rows.
- 3. Use the **substitution method** to solve the nonsquare system below:

- 4. Solve the **nonsquare** system below in terms of a, where a is any real number:
- $x = \frac{3 3}{3}$ $y = \frac{3 3}{3}$

$$\begin{cases} 2x + 3z = 3 \\ 4x - 3y + 7z = 5 \end{cases}$$

 $y = \frac{1}{3 \cdot 3 \cdot 3}$



- $\frac{x-3-2}{2}q$ $\frac{y-2}{2}$
- 5. Use **Gaussian elimination** to solve this system of equations. Be sure to...(i) convert to augmented matrix form and (ii) use both back-substitution and Gauss-Jordan elimination to solve for x, y and z.

$$\begin{cases} x - 3z = -2\\ 3x + y - 2z = 5\\ 2x + 2y + z = 4 \end{cases}$$

KIX

Use this space to continue work on (5).