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ft-uiowa-math2550

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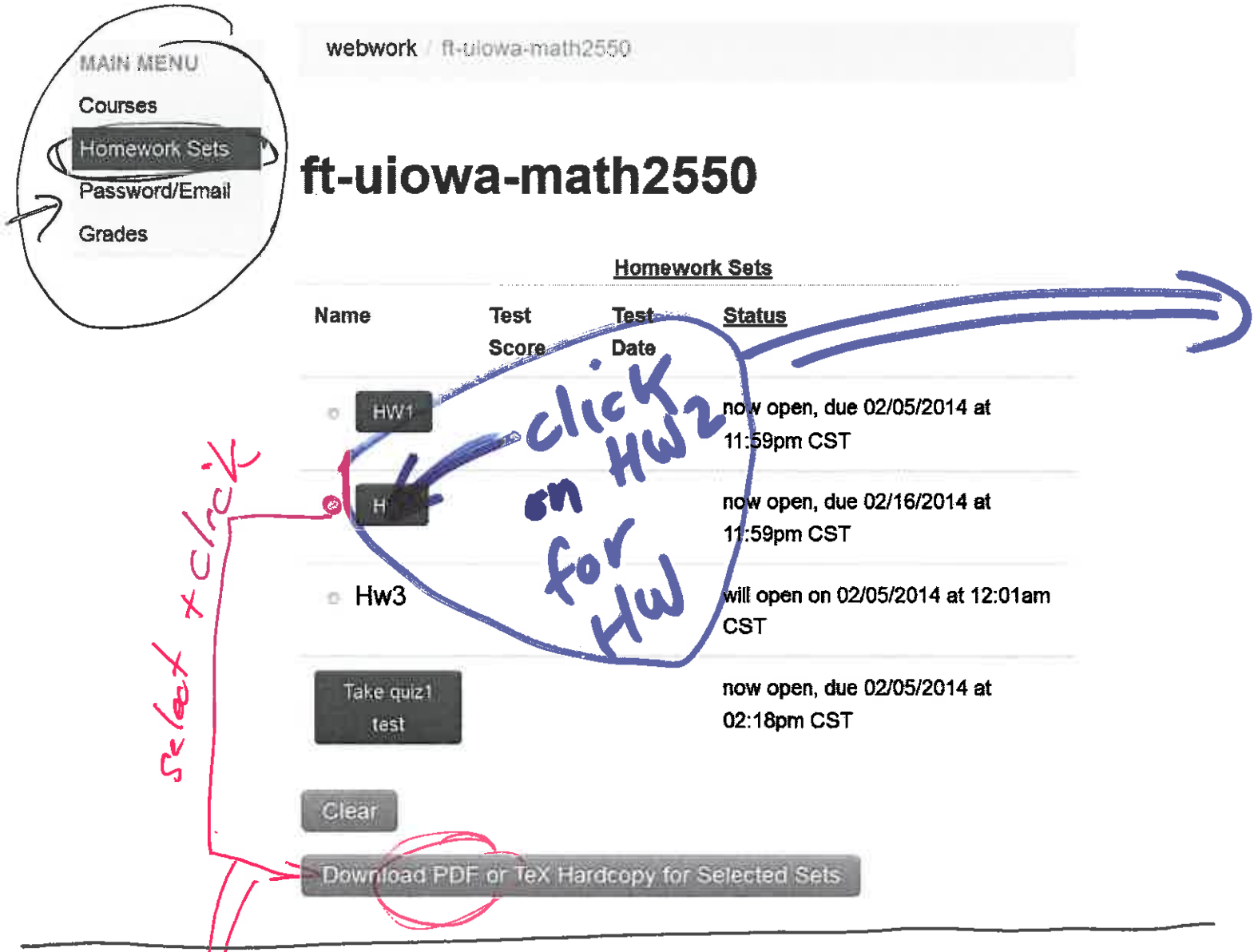
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Courses
Homework Sets
Password/Email
Grades
webwork / ft-uiowa-math2550
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Name
Test Score
Test Date
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HW1
now open, due 02/05/2014 at 11:59pm CST
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now open, due 02/16/2014 at 11:59pm CST
Hw3
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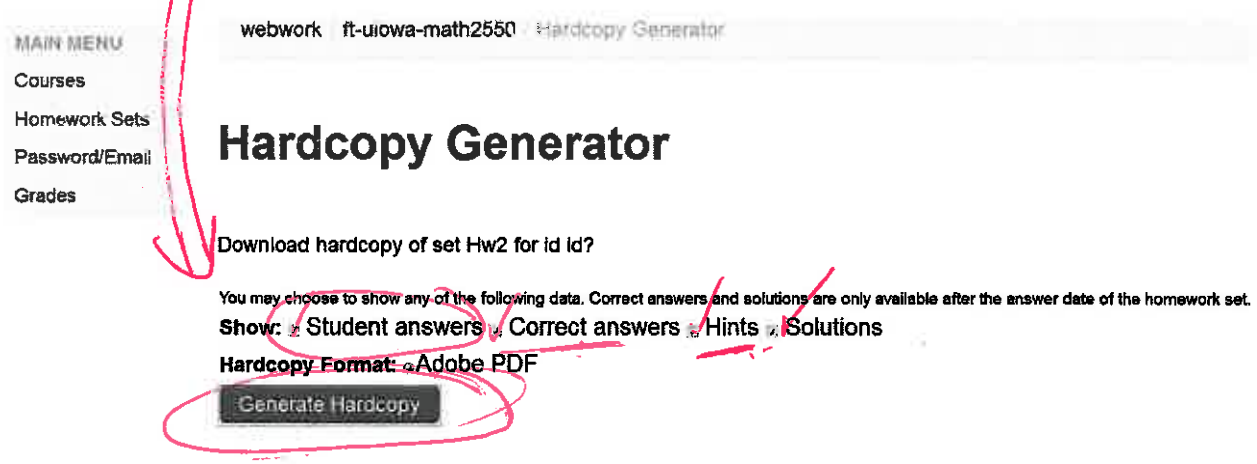
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Homework Sets
Password/Email
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1. (1 pt) Determine whether the following matrices are in echelon form, reduced echelon form or not in echelon form.

1. $\begin{bmatrix} -10 & 3 & -3 & -10 & 9 \\ 0 & -2 & 1 & 1 & 1 \\ 0 & 0 & 1 & 0 & 8 \\ 0 & 0 & 0 & 1 & 0 \end{bmatrix}$
   - A. Echelon Form
   - B. Reduced Echelon Form
   - C. Not in Echelon Form
2. $\begin{bmatrix} 1 & 1 & 10 \\ 1 & 0 & 5 \end{bmatrix}$
   - A. Echelon Form
   - B. Reduced Echelon Form
   - C. Not in Echelon Form
3. $\begin{bmatrix} 1 & 0 & 0 & -8 \\ 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 9 \end{bmatrix}$
   - A. Echelon Form
   - B. Reduced Echelon Form
   - C. Not in Echelon Form
4. $\begin{bmatrix} 1 & 0 & 0 & -10 \\ 0 & 1 & 0 & -6 \\ 0 & 0 & 0 & 0 \end{bmatrix}$
   - A. Echelon Form
   - B. Reduced Echelon Form
   - C. Not in Echelon Form

Answer(s) submitted:

-
-
-
-

(incorrect)

2. (1 pt) Let $A = \begin{bmatrix} 1 & 0 & 3 & 0 & -5 \\ 0 & 1 & 3 & 0 & 1 \\ 0 & 0 & 0 & 1 & 2 \\ 0 & 0 & 0 & 0 & 0 \end{bmatrix}$.

Is the matrix in echelon form? (input Yes or No) _____

Is the matrix in reduced echelon form? (input Yes or No) _____

question

- A. No solution
- B. Unique solution
- C. Infinitely many solutions
- D. none of the above

Answer(s) submitted:

-
-

(incorrect)

3. (1 pt) The reduced row-echelon forms of the augmented matrices of four systems are given below. How many solutions does each system have?

1. $\left[\begin{array}{ccc|c} 1 & 0 & 0 & 4 \\ 0 & 0 & 1 & -18 \end{array}\right]$
   - A. No solutions
   - B. Infinitely many solutions
   - C. Unique solution
   - D. None of the above
2. $\left[\begin{array}{cc|c} 1 & 0 & 17 \\ 0 & 1 & -7 \end{array}\right]$
   - A. No solutions
   - B. Unique solution
   - C. Infinitely many solutions
   - D. None of the above
3. $\left[\begin{array}{ccc|c} 1 & 0 & 1 & 0 \\ 0 & 1 & 12 & 0 \\ 0 & 0 & 0 & 1 \end{array}\right]$
   - A. No solutions
   - B. Infinitely many solutions
   - C. Unique solution
   - D. None of the above
4. $\left[\begin{array}{ccc|c} 0 & 1 & 0 & -3 \\ 0 & 0 & 1 & 9 \end{array}\right]$
   - A. No solutions
   - B. Unique solution
   - C. Infinitely many solutions
   - D. None of the above

Answer(s) submitted:

-
-
-
-

(incorrect)

4. (1 pt) Convert the system

$$\begin{aligned} 3x_1 + 10x_2 - 11x_3 &= -4 \\ x_1 + 3x_2 - 4x_3 &= -1 \\ 7x_1 + 24x_2 - 24x_3 &= -13 \end{aligned}$$

to an augmented matrix. Then reduce the system to echelon form and determine if the system is consistent. If the system in consistent, then find all solutions.

Augmented matrix: _____

Echelon form: _____

Is the system consistent? ?

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Courses

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Hw2

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Grades

Sets

HW1

Hw2

Hw3

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Hw2

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Problems

Name	Attempts	Remaining	Worth	Status
Problem 1	0	2	1	0%
Problem 2	0	5	1	0%
Problem 3	0	3	1	0%
Problem 4	0	5	1	0%
Problem 5	0	5	1	0%
Problem 6	0	5	1	0%

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Courses
Homework Sets
Hw2
Problem 1
Password/Email
Grades

Problems
Problem 1
Problem 2
Problem 3
Problem 4
Problem 5
Problem 6

Display Options

Hw2: Problem 1

Prev Up Next

(1 pt) Determine whether the following matrices are in echelon form, reduced echelon form or not in echelon form.

1.

$$\begin{bmatrix} -10 & 3 & -3 & -10 & 9 \\ 0 & -2 & 1 & 1 & 1 \\ 0 & 0 & 1 & 0 & 8 \\ 0 & 0 & 0 & 1 & 0 \end{bmatrix}$$

- **A.** Echelon Form
- **B.** Reduced Echelon Form
- **C.** Not in Echelon Form

2.

3.

4.

$$\begin{bmatrix} 1 & 0 & 0 & -10 \\ 0 & 1 & 0 & -6 \\ 0 & 0 & 0 & 0 \end{bmatrix}$$

- **A.** Echelon Form
- **B.** Reduced Echelon Form
- **C.** Not in Echelon Form

Note: *You can earn partial credit on this problem.*

Preview Answers Submit Answers

You have attempted this problem 0 times.
You have 2 attempts remaining.

Email instructor

Answers are NOT SAVED UNTIL SUBMIT

Hw2: Problem 1

Prev | Up | Next

Entered	Answer Preview
B	B
B	B

At least one of the answers above is NOT correct.
2 of the questions remain unanswered.

(1 pt) Determine whether the following matrices are in echelon form, reduced echelon form or not in echelon form.

1.

Note: *You can earn partial credit on this problem.*

Preview Answers | Submit Answers

Your score was recorded.
You have attempted this problem 1 time.
You received a score of 25% for this attempt.
Your overall recorded score is 25%.
You have 1 attempt remaining.

Email instructor

$x_5 = x_5$ enter if x_5 is a free variable