## Math 43 Quiz 8

Wed Dec 2, 2015

## SCORE: \_\_\_\_ / 30 POINTS

	THIS QUIZ IS DUE ON WED DEC 9, 2015 @ 1:45pm SHARP (NO LATES ACCEPTED YOU WILL SCORE 0 POINTS AFTER THAT TIME. YOU MAY E-MAIL ME A CLEAR READABLE SCAN OR PHOTO OF THE COMPLI NO LATER THAN TUE DEC 8.	D). ETED QUIZ	
	Sign below to confirm that the work shown on this quiz is strictly your own work. You may have consulted your textbook and your notes, but you did NOT consult other people, websites, software or any other sources of help.		
SIG	NATURE:		
lecoratio	n project.	SCORE:	/ 10 PTS

For a decoration project, QJ needs a mixture of 3 pounds of blue glass stones, 7 pounds of red glass stones and 7 pounds of green glass stones. The local supply store does not sell glass stones by individual colors. Instead, they carry 3 brands of mixed glass stones. By weight, Brand A contains 1 part blue stones, 2 parts red stones and 1 part green stones; Brand B contains equal parts red and green stones; and Brand C contains 2 parts blue stones, 1 part red stones and 5 parts green stones. How much of each brand of mixed stones must QJ buy in order to get the desired mixture of colored stones ? How many pounds of blue stones are in one pound of brand A? HINT: NOTES: You must use the pivot method shown in lecture, and you must state all row operations performed. Before you write the augmented matrix, scale all your equations so that there are no fractions. During the pivot method, it will be necessary to introduce a single fraction into the matrix. You must produce an intermediate matrix in row echelon form (REF) and a final matrix in reduced row echelon form (RREF). You must check that your final answer is correct.

Graph the solution of the system of inequalities below, and find the coordinates of all vertices.

SCORE: \_\_\_\_ / 10 PTS

 $2x + y \ge 5$  $x - y \ge 4$  $y < 4x - x^{2}$ 

Solve the system of equations

2x - 3y + 5z = -14- 3x + 4y - 6z = 19 - x + 2y - 4z = 9

 
 NOTES:
 You must use the pivot method shown in lecture, and you must state all row operations performed.

 You must produce an intermediate matrix in row echelon form (REF) and, if the system has a solution, a final matrix in reduced row echelon form (RREF).

 You must check that your final answer is correct (if the system has a solution).

SCORE: \_\_\_\_ / 10 PTS