

HOMEWORK 6

#	Question ID	Objective
1	1.7.1	Determine if a given set of vectors is linearly independent.
2	1.7.5	Determine if a given set of vectors is linearly independent.
3	1.7.9	Find values to complete vectors to make them linearly independent or dependent.
4	1.7.11	Find values to complete vectors to make them linearly independent or dependent.
5	1.7.16	Determine if a given set of vectors is linearly independent.
6	1.7.17	Determine if a given set of vectors is linearly independent.
7	1.7.21	Demonstrate understanding of concepts about linear independence.
8	1.7.24	Describe possible echelon forms of a matrix given information about the independence of the columns.
9	1.7.27	Demonstrate understanding of concepts about linear independence.

10

1.7.30

Demonstrate
understanding of concepts
about linear
independence.

HOMEWORK 7

#	Question ID	Objective
1	1.8.2	Algebraically find the image of a given vector under a linear transformation.
2	1.8.5	Given a linear transformation $T(x)=Ax$, find x for a given b in the image of T .
3	1.8.6	Given a linear transformation $T(x)=Ax$, find x for a given b in the image of T .
4	1.8.8	Demonstrate understanding of concepts about linear transformations and their matrices.
5	1.8.9	Given a linear transformation $T(x)=Ax$, find x for a given b in the image of T .
6	1.8.11	Determine if a vector is in the range of a given linear transformation.
7	1.8.17	Use linear properties to find the image of vector under a transformation.
8	1.8.19	Use linear properties to find the image of vector under a transformation.
9	1.8.7	Demonstrate understanding of concepts about linear transformations and their matrices.

10 1.8.33

Prove that a transformation is linear or nonlinear.

HOMEWORK 8

Question ID Objective

1	1.9.1	Find the standard matrix of a linear transformation.
2	1.9.3	Find the standard matrix of a linear transformation.
3	1.9.7	Find the standard matrix of a linear transformation.
4	1.9.8	Find the standard matrix of a linear transformation.
5	1.9.13	Demonstrate understanding of the geometric interpretation of a linear transformation.
6	1.9.15	Find the standard matrix of a linear transformation.
7	1.9.17	Find the standard matrix of a linear transformation.
8	1.9.24	Demonstrate understanding of one-to-one and onto properties.