

Math 205

Quiz #4

1. Suppose A is a 5×7 matrix. All of the following problems are short answer.

3 (a) What is the largest possible value for the dimension of the row space of A ?

5

$\frac{1}{3}$ (b) What is the smallest possible value for the dimension of the row space of A ?

0

3 (c) What is the largest possible value for the dimension of the column space of A ?

5

$\frac{1}{3}$ (d) What is the smallest possible value for the dimension of the column space of A ?

0

$\frac{1}{3}$ (e) What is the largest possible value for the dimension of the nullspace of A ?

7

3 (f) What is the smallest possible value for the dimension of the nullspace of A ?

2

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Quiz #4

1. Suppose A is a 4×6 matrix. All of the following problems are short answer.

3 (a) What is the largest possible value for the dimension of the row space of A ?

4

$\frac{1}{3}$ (b) What is the smallest possible value for the dimension of the row space of A ?

0

3 (c) What is the largest possible value for the dimension of the column space of A ?

4

$\frac{1}{3}$ (d) What is the smallest possible value for the dimension of the column space of A ?

0

$\frac{1}{3}$ (e) What is the largest possible value for the dimension of the nullspace of A ?

6

3 (f) What is the smallest possible value for the dimension of the nullspace of A ?

2