

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_

Quiz 3

MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} -11 & 5 & -16 \\ 0 & -4 & 0 \\ 8 & -7 & 13 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 1



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_

Quiz 3

MATH 104: Linear Algebra II

Let

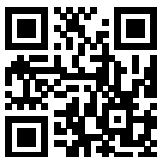
$$A = \begin{bmatrix} -3 & -1 & 0 \\ 2 & -6 & 0 \\ -1 & 1 & -4 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 2



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_

Quiz 3

MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} 30 & 4 & 56 \\ 30 & 7 & 63 \\ -16 & -2 & -30 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 3



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_

Quiz 3

MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} -10 & -6 & 6 \\ 18 & 11 & -12 \\ 10 & 7 & -8 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 4



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 3 MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} -9 & -8 & 6 \\ 22 & 21 & -18 \\ 8 & 8 & -7 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 5



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 3 MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} -39 & 70 & 98 \\ -20 & 36 & 47 \\ -2 & 4 & 7 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 6



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_

Quiz 3

MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} 5 & -36 & 66 \\ 4 & -31 & 58 \\ 2 & -14 & 26 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 7



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_

Quiz 3

MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} -29 & 38 & 48 \\ -15 & 20 & 24 \\ -6 & 8 & 10 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 8



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code



姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 3 MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} -9 & 2 & 26 \\ -8 & 5 & 16 \\ -4 & 0 & 13 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 9



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code

姓名 Name : \_\_\_\_\_ 學號 Student ID # : \_\_\_\_\_  
Quiz 3 MATH 104: Linear Algebra II

Let

$$A = \begin{bmatrix} 25 & 60 & -60 \\ -13 & -31 & 33 \\ -3 & -6 & 8 \end{bmatrix}.$$

Suppose the eigenvalues of  $A$  are  $\lambda_1, \dots, \lambda_3$ . Find the value of  $S = \sum_{i=1}^3 |\lambda_i|$ , where  $|\cdot|$  is the absolute value.

Check code =  $S \bmod 10$

**Solution.**

AbsSumEigs 10



Indicating your answer by **underlining it** or **circling it**.  
Compute the **check code** and fill it into the **box on the right**.

check code