

Introduction to Matrices



Overview of problems



Example Set: A

Define the following:

Matrix

Entries

Square Matrix

Order



Example Set: B

Organize the home loan information into the matrix

- *A 20 yr. \$150,000 house loan requires a payment of \$600/mo.
- *A 20 yr. \$200,000 house loan requires a payment of \$700/mo.
- *A 30 yr \$150,000 house loan requires a payment of \$500/mo.
- *A 30 yr \$200,000 house loan requires a payment of \$610/mo.

		LOAN Amt.	
		\$150,000	\$200,000
Term	20yr.		
	30yr.		

Loan Payment Information



Example Set: C

True or False: Matrices can be added?

What type of equations can we solve using matrices?

True or False: Matrices help us organize data?

Overview of problems- KEY



Example Set: A

Define the following:

Matrix a way to organize information by rows and columns.

Entries the individual parts of data within a matrix.

Square Matrix a matrix that has an equal number of rows and columns.

Order the size of a matrix expressed as the number of rows \times the number of columns.
($R \times C$)



Example Set: B

Organize the home loan information into the matrix

- *A 20 yr. \$150,000 house loan requires a payment of \$600/mo.
- *A 20 yr. \$200,000 house loan requires a payment of \$700/mo.
- *A 30 yr \$150,000 house loan requires a payment of \$500/mo.
- *A 30 yr \$200,000 house loan requires a payment of \$610/mo.

		LOAN Amt.	
		\$150,000	\$200,000
Term	20yr.	600	700
	30yr.	500	610

Loan Payment Information



Example Set: C

True or False: Matrices can be added?

True

What type of equations can we solve using matrices?

systems of linear equations

True or False: Matrices help us organize data?

True