# Show and Tell Group Activity

In our recent **Show N Tell** ‘Prison Break’ activity, each member selected a mathematical topic to explore in depth. The topics were divided among us based on our interests and strengths. We also defined clear objectives and set research criteria for each topic to guide our studies and ensure a focused learning approach.

## Game Theory - Hussnain

### Objectives:

1. To gain a foundational understanding of the concepts within this topic.  
2. To explore real-world applications and implications of these mathematical principles.  
3. To prepare and present key insights and examples to the group.

### Research Criterion:

1. Presentation Clarity: Organize information for clear and effective group sharing.  
2. Supporting Examples: Provide relevant examples to demonstrate understanding.  
3. Resources Used: Use reputable sources including textbooks, academic papers, and online resources.

## Graph Theory - Touheed

### Objectives:

1. To gain a foundational understanding of the concepts within this topic.  
2. To explore real-world applications and implications of these mathematical principles.  
3. To prepare and present key insights and examples to the group.

### Research Criterion:

1. Depth of Conceptual Understanding: Ensure a solid grasp of basic definitions and theorems.  
2. Practical Applications: Investigate how these concepts are applied practically.

## Combination and Permutation - Taha

### Objectives:

1. To gain a foundational understanding of the concepts within this topic.  
2. To explore real-world applications and implications of these mathematical principles.  
3. To prepare and present key insights and examples to the group.

### Research Criterion:

## 1. Depth of Conceptual Understanding: Ensure a solid grasp of basic definitions and theorems. 2. Practical Applications: Investigate how these concepts are applied practically. 3. Presentation Clarity: Organize information for clear and effective group sharing. Sets - Bilawal

### Objectives:

1. To gain a foundational understanding of the concepts within this topic.  
2. To explore real-world applications and implications of these mathematical principles.  
3. To prepare and present key insights and examples to the group.

### Research Criterion:

1. Depth of Conceptual Understanding: Ensure a solid grasp of basic definitions and theorems.  
2. Presentation Clarity: Organize information for clear and effective group sharing.  
3. Supporting Examples: Provide relevant examples to demonstrate understanding

## Logics - Ibraim

### Objectives:

1. To gain a foundational understanding of the concepts within this topic.  
2. To explore real-world applications and implications of these mathematical principles.  
3. To prepare and present key insights and examples to the group.

### Research Criterion:

1. Depth of Conceptual Understanding: Ensure a solid grasp of basic definitions and theorems.  
2. Practical Applications: Investigate how these concepts are applied practically.  
3. Presentation Clarity: Organize information for clear and effective group sharing.