

Assigning Boy Scouts to Patrols

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MATH 480, Community Project

Problem Description

- Scoutmaster Gene Bruce of Troop 407 in Kent, Washington must assign new boy scouts into their patrols. In these patrols, the scouts engage in numerous activities and form close bonds.
- The number of incoming scouts are increasing requiring multiple patrols to better organize activities and to form a small community between scouts. The younger scouts are temperamental and awkward when dealing with adversity, ruining their experience and causing many to quit.
- **Goal: Assign 13 boy scouts of appropriate size (of 6-8 scouts) to two patrols such that we maximize the retention rate of the scouts by avoiding severe conflicts and maximizing positive relationships between scouts.**

Simplifications

- Instead of considering the scouts' complex personality and their interactions with other scouts, we simplified by only asking each scout which other scouts they liked or disliked.
- Add last simplification

A Mathematical Interpretation

1 enemy + 1 enemy = 0 survivors

Our Solution

Isolate unloved scouts to reinforce feelings of social helplessness.

Blocks

Block Title

You can also highlight sections of your presentation in a block, with it's own title

Theorem

There are separate environments for theorems, examples, definitions and proofs.



Example

Here is an example of an example block.

Summary

- The **first main message** of your talk in one or two lines.
- The **second main message** of your talk in one or two lines.
- Perhaps a **third message**, but not more than that.
- Outlook
 - ▶ Something you haven't solved.
 - ▶ Something else you haven't solved.

For Further Reading I

-  A. Author.
Handbook of Everything.
Some Press, 1990.
-  S. Someone.
On this and that.
Journal of This and That, 2(1):50–100, 2000.