



Problem of the Week

Problem C and Solution

The First Escape

Problem

Ingrid, Jayant, and Radko each brought a group of friends to POTW Escape. Each group completed a different escape room: Grandma's Attic, In Plain Sight, or The Vault. The three groups all started at the same time, but finished at different times. Use the clues below to match each group with the name of their escape room, and the order in which they finished.

- (1) Ingrid's group finished before Radko's group.
- (2) The group that completed Grandma's Attic was not Radko's group.
- (3) The Vault was completed before In Plain Sight.
- (4) Radko's group finished after Jayant's group.
- (5) Ingrid's group did not complete The Vault.
- (6) The group that finished first did not complete Grandma's Attic.

Solution

From clues (1) and (4), since Ingrid's group finished before Radko's group and Radko's group finished after Jayant's group, we can conclude that Radko's group finished last.

Then, from clue (2) we can conclude that Grandma's Attic was completed either first or second. However, clue (6) states that the group that finished first did not complete Grandma's Attic. So Grandma's Attic must have been completed second. We summarize what we know so far in the following table.

	Last to Finish	Second to Finish	First to Finish
Group Leader	Radko		
Room Name		Grandma's Attic	

Then, from clue (3) we can conclude that The Vault was completed first and In Plain Sight was completed last. We summarize what we know so far in the following table.

	Last to Finish	Second to Finish	First to Finish
Group Leader	Radko		
Room Name	In Plain Sight	Grandma's Attic	The Vault

Finally, from clue (5) we can conclude that Ingrid's group completed Grandma's Attic, so then Jayant's group completed The Vault. The completed table is shown.

	Last to Finish	Second to Finish	First to Finish
Group Leader	Radko	Ingrid	Jayant
Room Name	In Plain Sight	Grandma's Attic	The Vault