

Zombies and Survivors on Graphs

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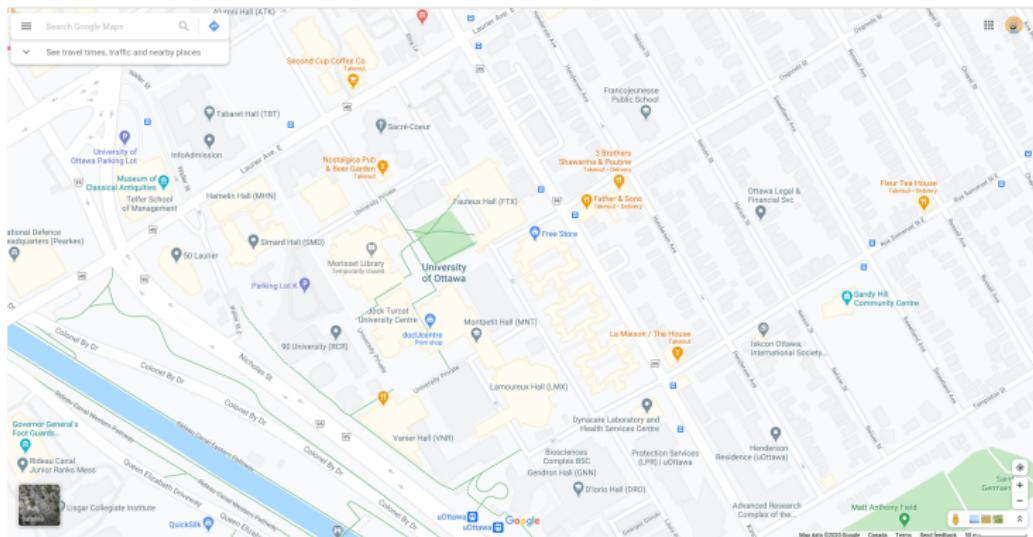
Outline

1 Intro

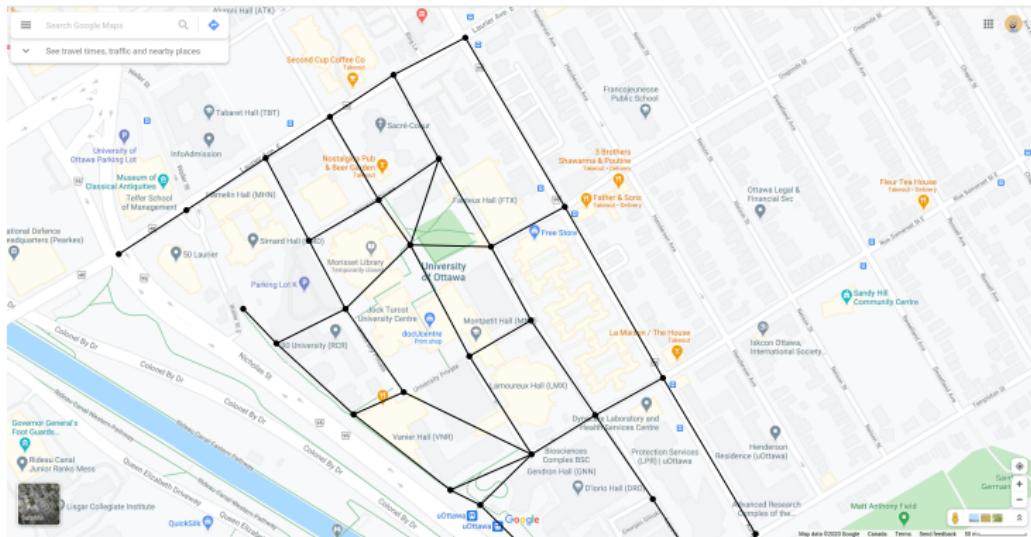
2 Planar Zombies

3 Cycle With One Chord

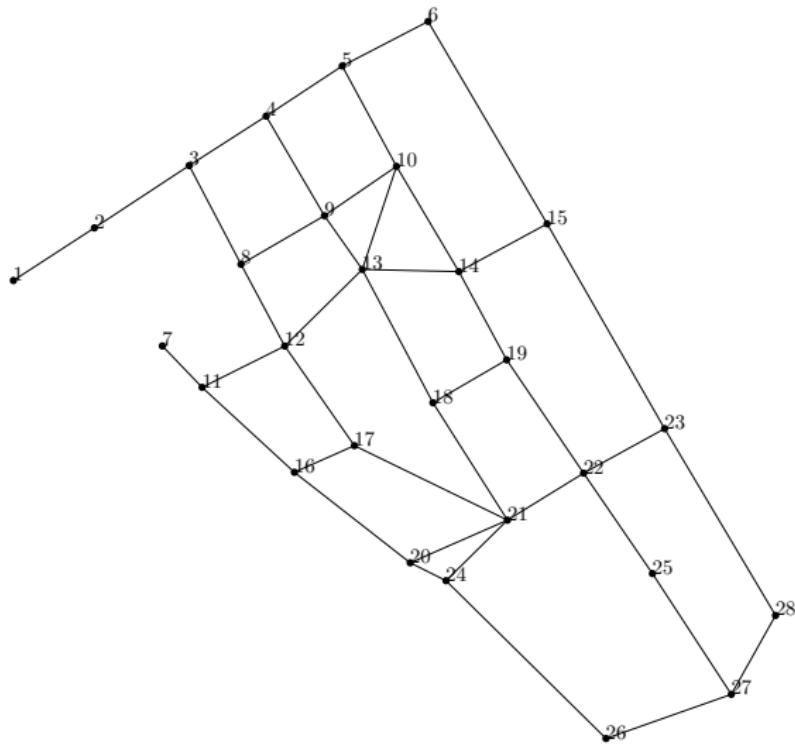
Games on Graphs



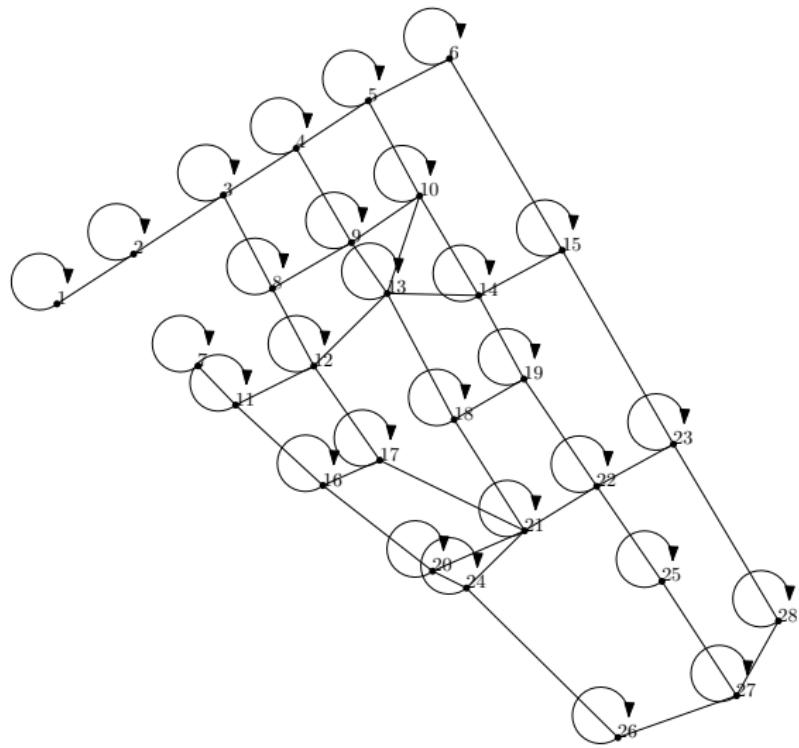
Games on Graphs



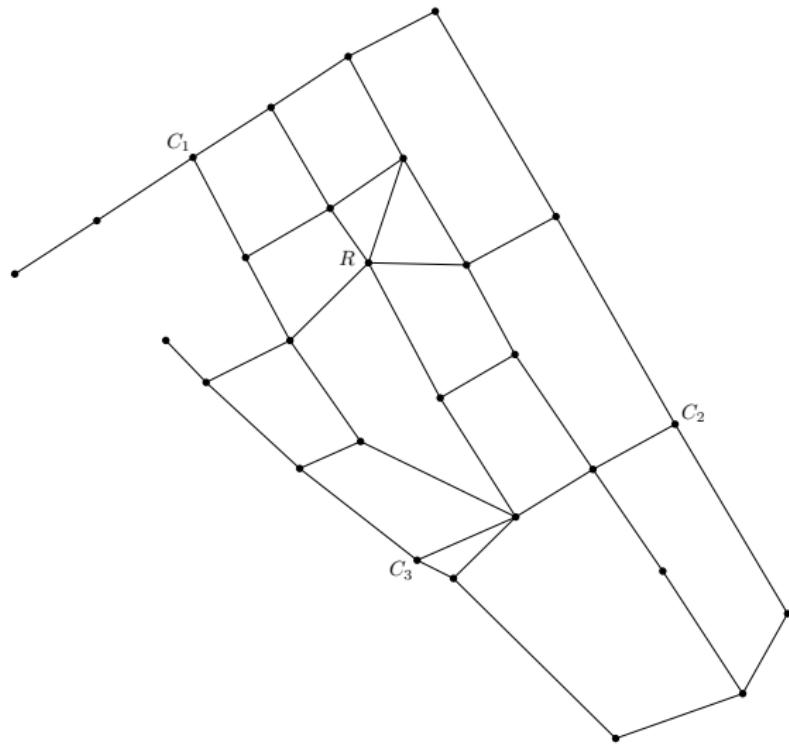
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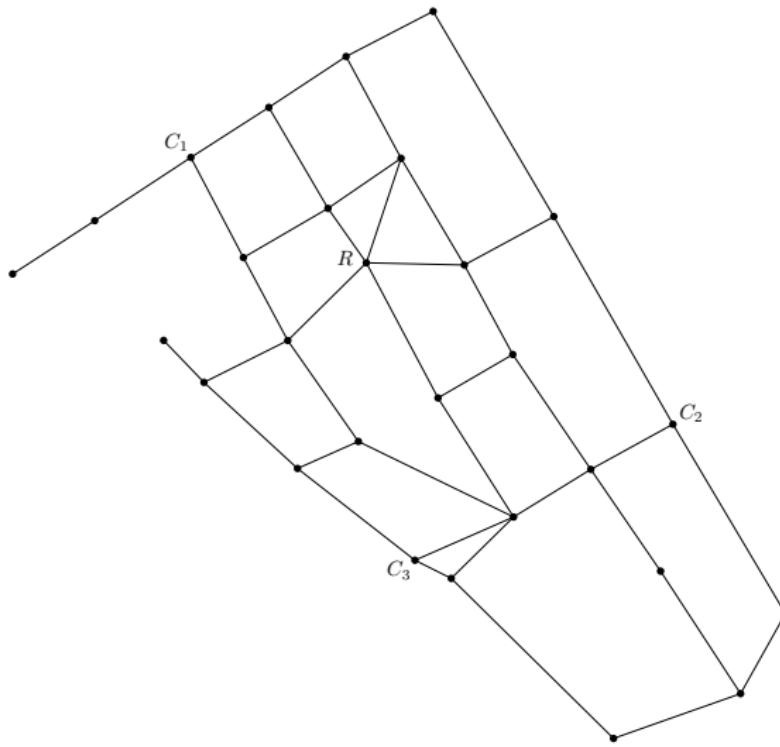
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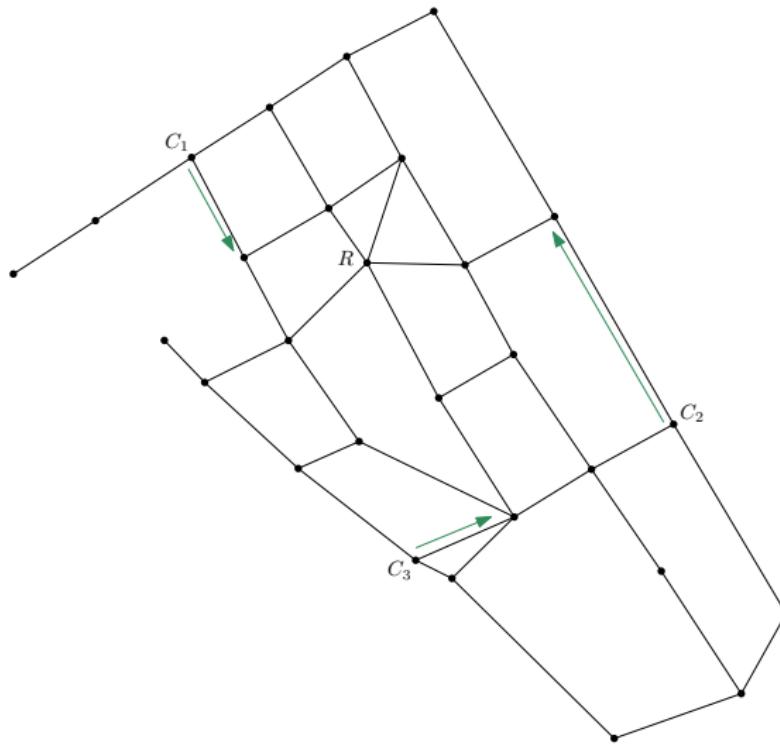
Games on Graphs



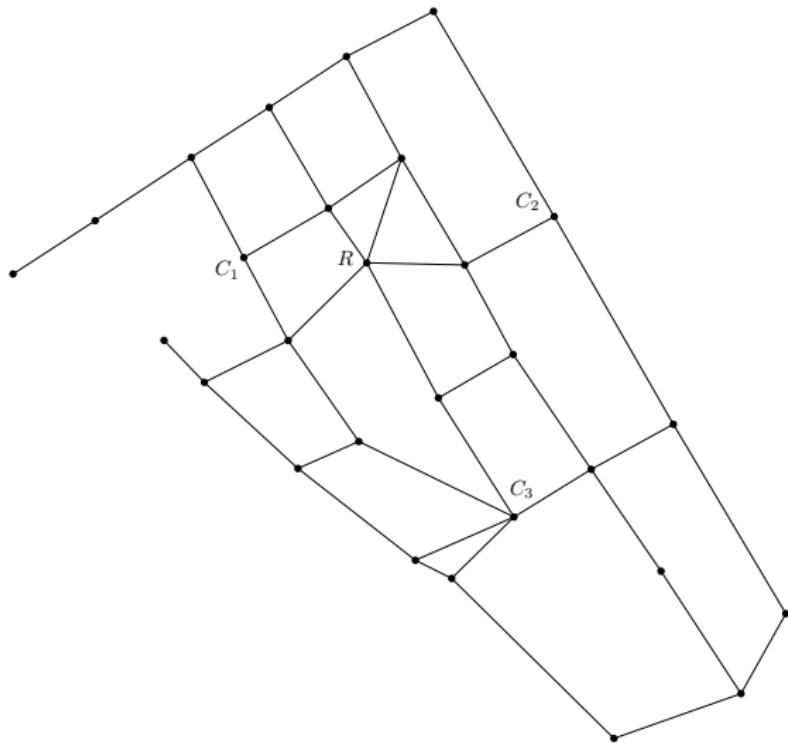
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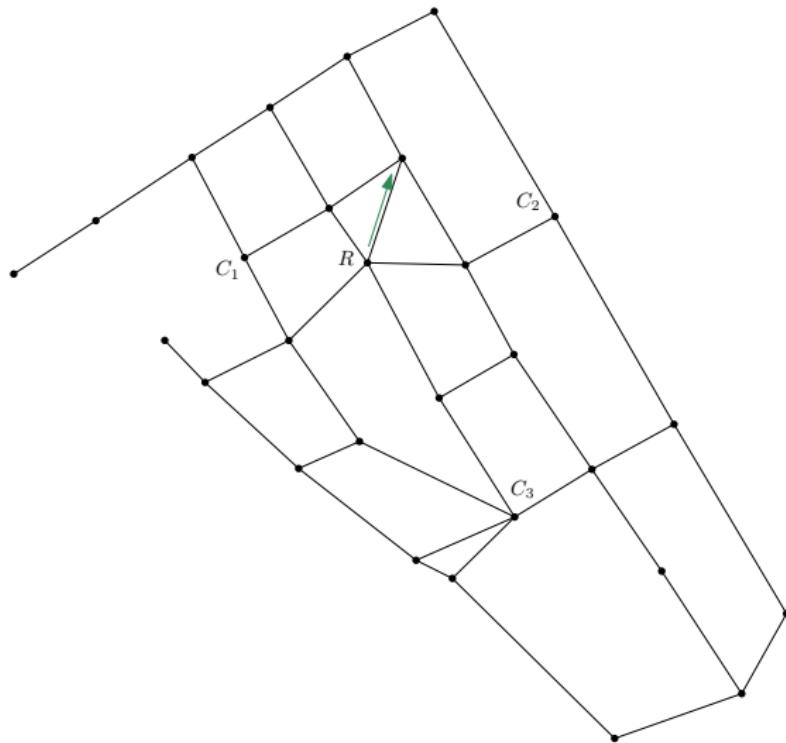
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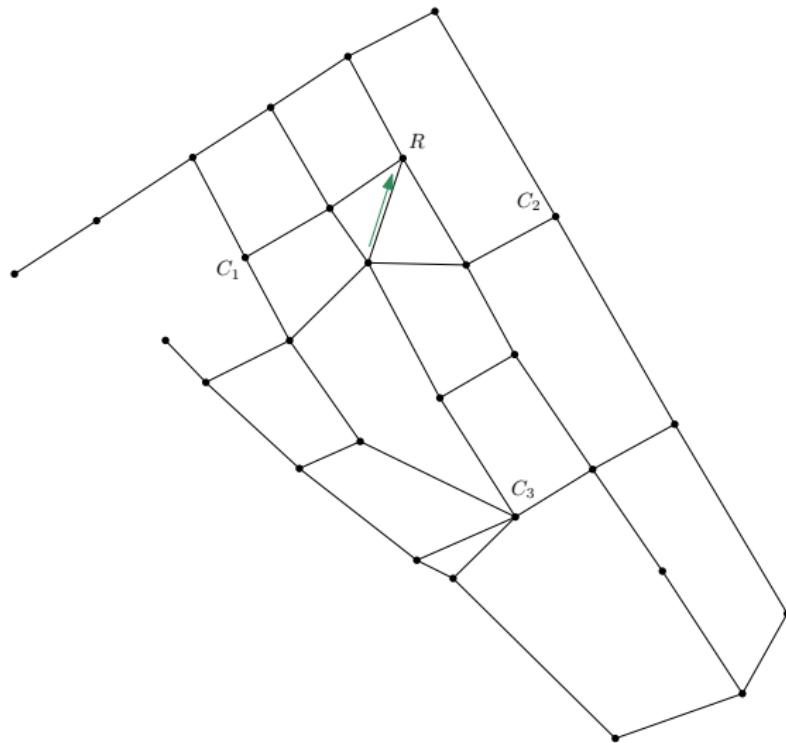
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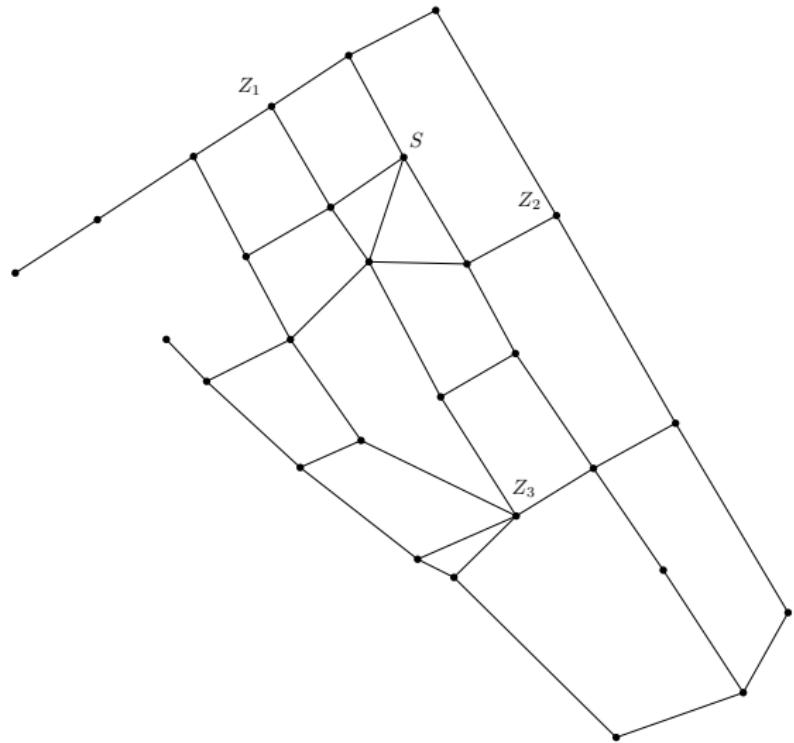
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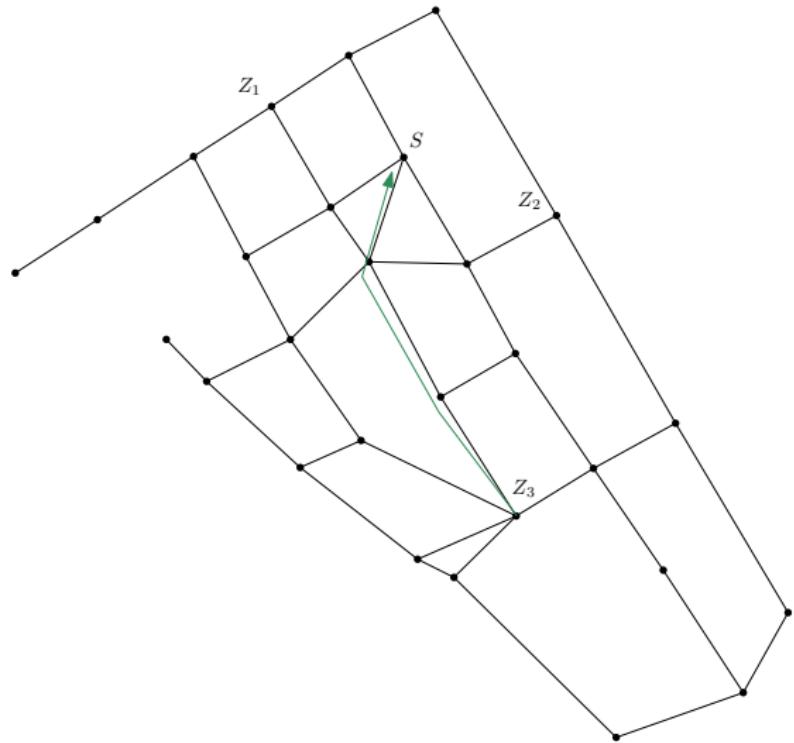
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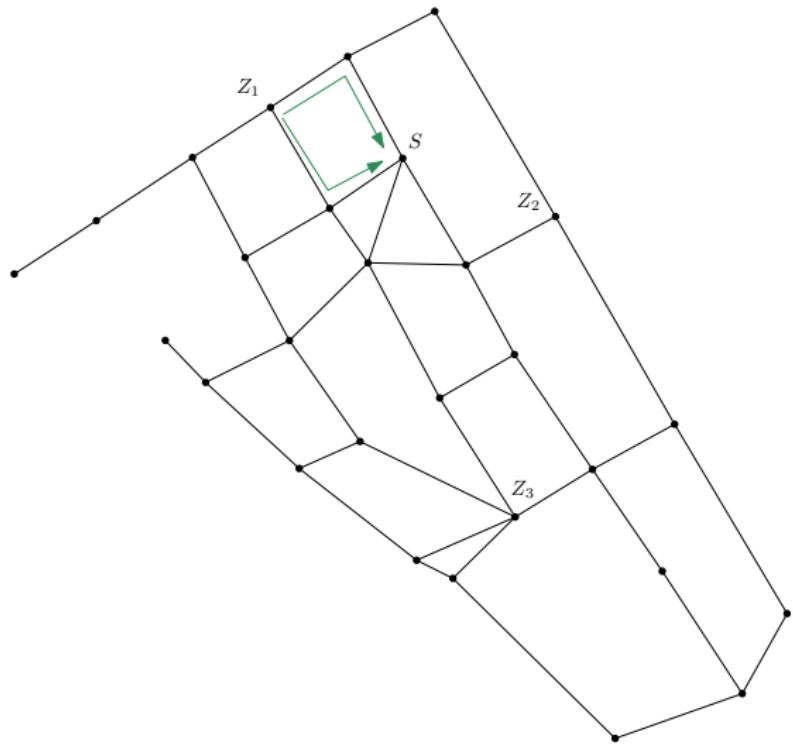
Zombies and Survivors



Zombies and Survivors



Zombies and Survivors



Cop-Number and Zombie-Number

- Cop-Number $c(G)$ number of cops needed to guarantee a win on G .

Cop-Number and Zombie-Number

- Cop-Number $c(G)$ number of cops needed to guarantee a win on G .
- Zombie-Number $z(G)$ number of zombies needed to guarantee a win on G .

On a cycle with one chord

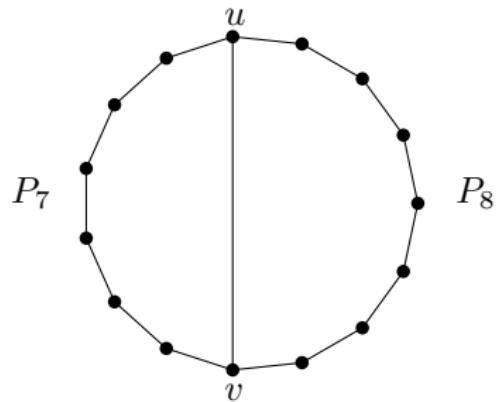


Figure: $Q_{7,8}$

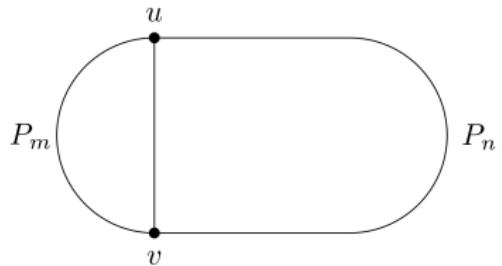


Figure: $Q_{m,n}$

Possible z_2s -paths

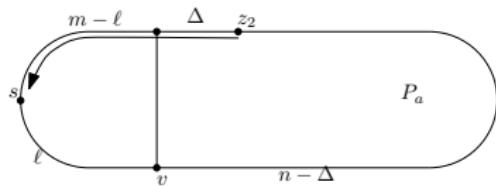


Figure: Path A

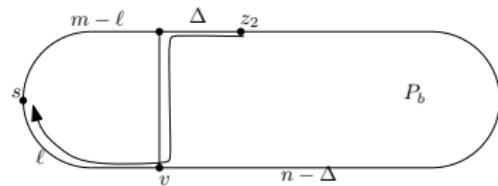


Figure: Path B

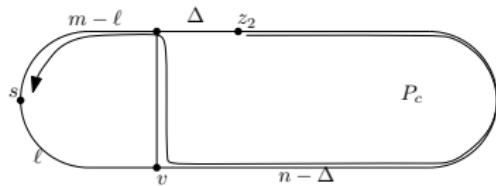


Figure: Path C

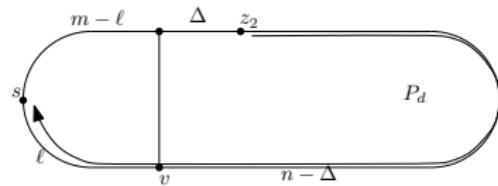


Figure: Path D