Hitting Set → Dominating Set

sets

elements
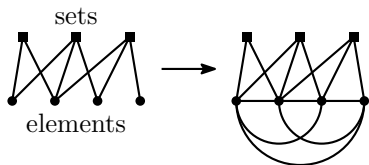
Multicolored Independent Set → List Coloring

$\{1\}$ $\{2,6\}$ $\{5\}$ $\{3,4\}$

$\{1,2\}$ $\{2,5\}$ . . .
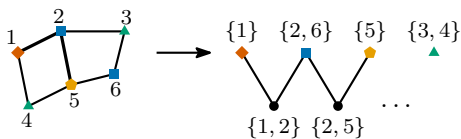
Multicolored Clique → Strongly Connected Steiner Subgraph

first try:

good: enforce one from each color class
unclear: enforce clique
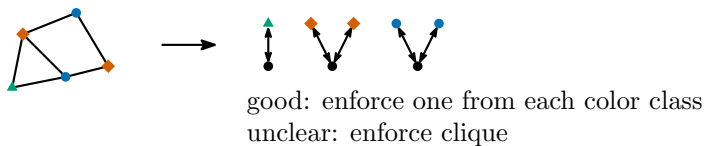
second try: select vertices and edges
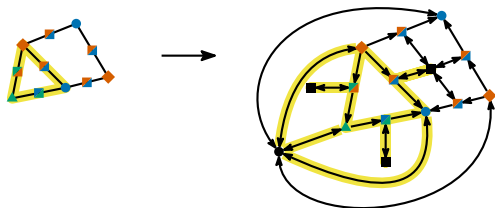
→ enforcing endpoints of each selected edge to be selected
■ terminal, enforcing selection of each color pair
• terminal ensuring connectedness for a clique