## Cheating

(rev. 10/24/22)

If the system seeks a majority, using runoff elections, another problem is "cheating":

Example 2 (17 voters):

(8 voters) Donald > Micky > Goofy;
(5 v.) Micky > Donald > Goofy;
(4 v.) Goofy > Micky > Donald.

"Honest" Election (Everybody votes their first preference.): (round 1) Donald – 8, Micky – 5, <del>Goofy – 4</del>. (r. 2) Micky – 9, Donald – 8. Micky wins.

Ranked Choice - Same Result, without separate runoff.

2 of Donald's supporters "cheat" by voting for Goofy to eliminate Micky:
(r. 1) Donald – 6; Goofy – 6; Micky – 5.
(r. 2) Donald – 13, Goofy 4. Donald wins, though a majority preferred Micky.

Approval Voting (Assuming all vote for their  $1^{st}$  and  $2^{nd}$  choice.): Micky -8+5+4 = 17Donald -8+5 = 13Goofy -4Micky wins.