## Are those constraints enough?

Fill out the poll everywhere for Activity Credit!
Go to pollev.com/cse417 and login with your UW identity

Suppose we used those constraints, ran the 3-SAT solver on these constraints, and just return what it says.
Are we done? If this reduction is correct, explain to each other why! If it's not correct explain why not.

| English - for each edge $(u, v)$ | SAT |
| :--- | :--- |
| If $u$ is red, then $v$ is blue or green | $x_{u, r}==$ False $\\| x_{v, b}==$ True $\\| x_{v, g}==$ True |
| If $u$ is blue, then $v$ is red or green | $x_{u, b}==$ False $\\| x_{v, r}==$ True $\\| x_{v, g}==$ True |
| If $u$ is green, then $v$ is red or blue | $x_{u, g}==$ False $\\| x_{v, r}==$ True $\\| x_{v, b}==$ True |
| If $v$ is red, then $u$ is blue or green | $x_{v, r}==$ False $\\| x_{u, b}==$ True $\\| x_{u, g}==$ True |
| If $v$ is blue, then $u$ is red or green | $x_{v, b}==$ False $\\| x_{u, r}==$ True $\\| x_{u, g}==$ True |
| If $v$ is green, then $u$ is red or blue | $x_{v, g}==$ False $\\| x_{u, r}==$ True $\\| x_{u, b}==$ True |

