

first name

last name

id#

no devices

50 min

2020 cgt quiz 3

1. Let $A = \text{clobber}(\text{xxo})$. Let $B = \text{clobber}(\text{xxxo})$. Draw the game tree for $A - B$.

The outcome class of $A - B$ is _____ because (justify briefly)

2. $2 = \{1 \mid \}$. $2* = 2 + *$. $*2 = \{0, * \mid 0, *\}$.

$2*$ has left options _____ and right options _____

The outcome class of $*2 + *$ is _____ because (justify briefly)

Prove/disprove: $*2 = *$. (use your answer to the previous part)

3. Let $G = \{L_1, L_2, L_3 \mid R_1, R_2, R_3\}$. Assume that $L_1 \leq L_2$, $L_1 \parallel L_3$, $L_2 \parallel L_3$ and that $R_1 \leq R_2$, $R_1 \parallel R_3$, $R_2 \parallel R_3$. By pruning dominated options, the simplest game equal to G we can find is

$$H = \{ \text{_____} \mid \text{_____} \}.$$

4. Let $G = \{L_1, L_2, L_3 \mid R_1, R_2, R_3\}$. Assume that $L_2 = \{A, B, C \mid D, E, F\}$ and that $D = \{U, V, W \mid X, Y, Z\}$. By part II of the canonical form theorem, if the relation between _____ and _____ is _____ then we can simplify G , because it will be equal to this game (give all left, right options)

$$\{ \text{_____} \mid \text{_____} \}$$

5. $\uparrow = \{0 \mid *\}$. $\downarrow = -\uparrow$. Draw the tree for $G = \{\uparrow \mid \downarrow\}$.

The simplest game equal to G is (**circle one**) 0 * G itself none of these, because
