

A Logic Puzzle Regarding Common Knowledge

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Western University · Econ 2261 · Winter 2020

Twenty three blue-eyed logicians and thirteen brown-eyed logicians are in a room. At the end of each day, those logicians who know for sure the color of their own eyes leave the room. Each logician can see the eyes of everyone else but not his own eyes. One day, a public announcement is made that “at least one logician in the room has blue eyes”.

- (i) How many days pass after the announcement before any logicians leave the room?
- (ii) How many days pass after the announcement until every logician has left?

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