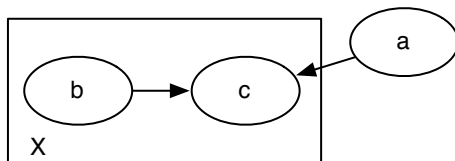


Question #1

For the relational probabilistic model:

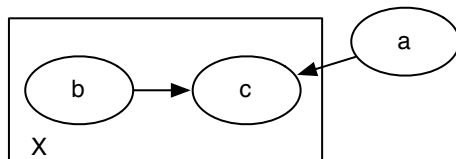


If the population of X is n , how many random variables are in the grounding:

- (a) $n + 1$
- (b) $2n + 1$
- (c) $n + 2$
- (d) 3
- (e) $3n$

Question #2

For the relational probabilistic model:

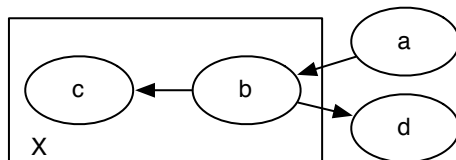


how many numbers need to be specified for a tabular representation of the conditional probabilities, if the population of X is n , and all variables are Boolean:

- (a) 3
- (b) 5
- (c) 6
- (d) $3n$
- (e) $2n + 1$

Question #3

For the relational probabilistic model:

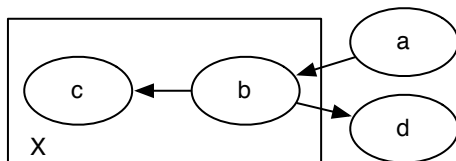


which of the following conditional probabilities cannot be defined as a table and requires an aggregator:

- (a) $P(a)$
- (b) $P(b(X)|a)$
- (c) $P(c(X)|b(X))$
- (d) $P(d|b(X))$

Question #4

For the relational probabilistic model:

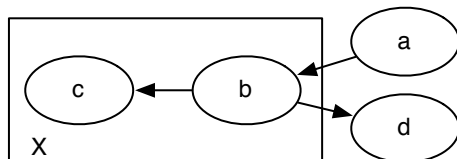


If the population of X is n , how many random variables are in the grounding:

- (a) $n + 2$
- (b) $2n + 2$
- (c) $n^2 + 2$
- (d) 4
- (e) $4n$

Question #5

For the relational probabilistic model:

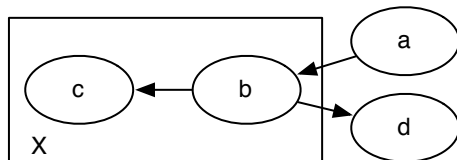


how many numbers need to be specified for a tabular presentation of the conditional probabilities if the population of X is n , all variables are Boolean:

- (a) 4
- (b) 5
- (c) 6
- (d) $2n + 2$
- (e) A tabular representation is not possible.

Question #6

For the relational probabilistic model:

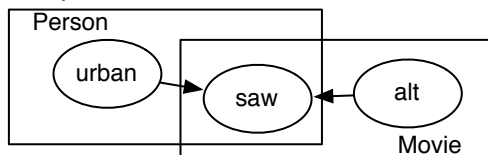


how many numbers need to be specified if the population of X is n , all variables are Boolean, the aggregator is a noisy-or (which requires 1 parameter) and the other conditional probabilities are specified as tables:

- (a) 4
- (b) 5
- (c) 6
- (d) $4n$
- (e) $2n + 2$

Question #7

For the relational probabilistic model:

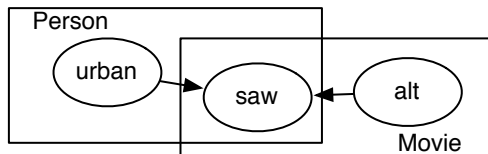


If the population of *Person* is n and the population of *Movie* is m , how many random variables are in the grounding:

- (a) $n + m$
- (b) $2n + 2m$
- (c) $n + m + nm$
- (d) 3
- (e) $3nm$

Question #8

For the relational probabilistic model:

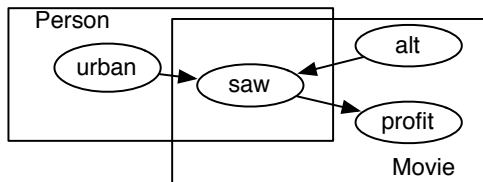


If the population of *Person* is n , the population of *Movie* is m , and all variables are Boolean, how many numbers need to be specified for a tabular representation of the conditional probabilities:

- (a) 3
- (b) 4
- (c) 6
- (d) $n + m + 4nm$
- (e) a tabular representation is not possible

Question #9

For the relational probabilistic model:

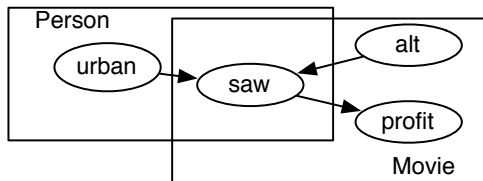


If the population of *Person* is n and the population of *Movie* is m , how many random variables are in the grounding:

- (a) $2n + 3m$
- (b) $n + 2m + nm$
- (c) 4
- (d) $4nm$
- (e) none of the above.

Question #10

For the relational probabilistic model:

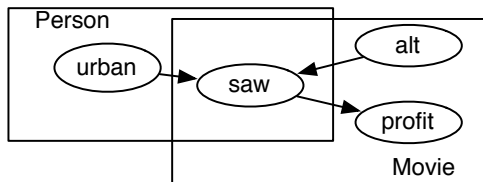


If the population of *Person* is n , the population of *Movie* is m , and all variables are Boolean, how many numbers need to be specified for a tabular representation of the conditional probabilities:

- (a) 6
- (b) 8
- (c) $n + 2m + 4nm$
- (d) a tabular representation is not possible
- (e) none of the above

Question #11

For the relational probabilistic model:



Which of the following would not be a clause in an Independent Choice Logic representation:

- (a) $profit(M) \leftarrow saw(P, M) \& n_9(P, M).$
- (b) $saw(P, M) \leftarrow urban(M) \& \sim alt(M) \& n_7(P, M).$
- (c) $saw(P, M) \leftarrow urban(M) \& \sim alt(M) \& profit(M) \& n_6(P, M).$
- (d) $saw(P, M) \leftarrow alt(M) \& n_{12}(P, M).$
- (e) all of the above are possible.