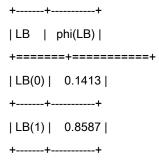
The model Independencies are shown below:

```
(UR \perp LB)
(UR \perp OR \mid D)
(UR \perp OR \mid LB, D)
(LB \perp UR)
(LB \perp OR \mid D)
(LB \perp OR \mid UR, D)
(OR \perp UR, LB \mid D)
(OR \perp LB \mid UR, D)
(OR \perp UR \mid LB, D)
```

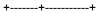
Variable Elimination

Using variable elimination, the probability the battery is low given that Olga reports Jason dropping the ball is 0.1413.



Approximate Inference

The same probability was found using approximate inference, and as the number of samples increased, the result converged to the exact method above.



| LB | phi(LB) | +=====+ | LB(0) | 0.1433 | +-----+ | LB(1) | 0.8567 | +-----+