

— SAVE JOHN CONNOR —

What's the rational best estimate of the following probabilities?

1. $P(\neg e)$?
2. $P(\neg r \mid e)$?
3. $P(\neg r \wedge e)$?
4. $P(\text{asylum} \mid \neg r \wedge e)$?
5. $P(\text{asylum} \wedge \neg r \wedge e)$?
6. $P(\neg k \wedge \neg n \wedge \text{atlarge} \wedge r \wedge e)$?
7. John and the “Good Terminator” (Arnold Schwarzenegger) are fleeing the shopping mall. John wants to go rescue his mom from the insane asylum, since he has learned she's been telling the truth about all this futuristic apocalyptic mumbo jumbo all along. The Good Terminator replies, “Negative. The T-1000 will definitely try to reacquire you there.” **Quantify this.** At this moment, what probability should the Good Terminator assign to the T-1000 being at the asylum?
8. On their way, John insists that they stop at a “pay phone” so he can call his foster parents. While on the phone, he observes that his foster mom is much nicer than usual. At the Good Terminator's prodding, she is also shown to have apparently forgotten their dog Max's name. Based on this information, the Good Terminator updates its/his estimated probabilities. *Now* how likely should it/he think that the T-1000 is at the insane asylum?