

ESCUELA COLOMBIANA DE INGENIERÍA LÓGICA CALCULATORIA

Taller 02

Simbolización (Formalización)

1. Para cada una de las siguientes oraciones, identifique las proposiciones y simbolice:

(Fuente: Traducido de <https://examples.yourdictionary.com/examples-of-logic.html>)

- Es peligroso conducir cuando está nevando. Esta nevando ahora. Sería peligroso conducir en este momento..
- Cuando llueve los árboles se mojan. Los árboles están húmedos esta mañana, así que llovió anoche.
- Un paraguas evita que se moje bajo la lluvia. Alicia tomó su paraguas y no se mojó. Probablemente estaba lloviendo.
- Las luces rojas previenen accidentes. Miguél no tuvo un accidente, por lo tanto, Miguél se detuvo en una luz roja.

2. For each of the following sentences , identify the propositions, and symbolize:

(Source: <https://www.futurelearn.com/courses/logical-and-critical-thinking/0/steps/9153>)

- If there is a purple elephant in the hall, then I am a giant turkey. There is a purple elephant in the hall, therefore, I'm a giant turkey.
- Liliane is Patrick's sister, and Patrick is Sylvie's brother. Therefore, Liliane is Sylvie's sister.
- If you smoke pot, even only once in your life, you are very likely to start using heroin. You do smoke pot, and therefore, you will probably start using heroin.
- If you are a confident driver and have never been in an accident, then driving over the speed limit is not dangerous for you or others. You are a confident driver and have never been in an accident. Doubtless, then, driving over the speed limit is not dangerous for you or others.
- We left our parrot in the house this morning. The nearest neighbor lives one kilometer away. When we got home from work, the parrot was gone. It's most probable that our neighbor stole the parrot.

3. Para cada una de las siguientes oraciones, identifique las proposiciones y simbolice:

(Fuente: Traducido de <https://msu.edu/course/sw/891/stocks/reserve/phiinde.pdf>)

- Pamina es instructora de yoga, miembro de "People for the Ethical Treatment of Animals" y miembro de "Hogtown Granary Food Co-op". Papagena es instructora de yoga, miembro de "People for the Ethical Treatment of Animals" y miembro de "Hogtown Granary Food Co-op". Papagena es vegetariana. Por lo tanto, Pamina es vegetariana.
- Dos de los últimos tres ladrones referidos eran escolares ausentes. Fred acababa de ser referido por robar en una tienda. Es muy probable que Fred también sea un escolar ausente.

4. For each of the following sentences , identify the propositions, and symbolize:

(Source: <https://www.futurelearn.com/courses/logical-and-critical-thinking/0/steps/9153>)

- There's been a popular revolutionary uprising in Tunisia, which is a North African Arab nation. There's been a popular revolutionary uprising in Libya, also a North African Arab nation. There's been a popular revolutionary uprising in Egypt, another North African Arab nation. There's been a popular revolutionary uprising in Bahrain, yet another North African Arab nation. Finally, there's been a popular revolutionary uprising in Iran, which is an Arab nation. So there will be a popular revolutionary uprising in at least one other Arab country in the next few years.

5. For each of the following sentences , identify the propositions, and symbolize:
(Source: <https://philosophy.lander.edu/logic/structure.html>)
- If students were environmentally aware, they would object to the endangering of any species of animal. The well-known Greenwood white squirrel has become endangered as it has disappeared from the Lander Campus because the building of the library destroyed its native habitat. No Lander students objected. Thus, Lander students are not environmentally aware.
6. For each of the following sentences , identify the propositions, and symbolize:
Source: <https://philosophy.lander.edu/logic/structure.html>
- If we set our ideals too High, then we will Not meet those ideals. If we do Not meet those ideals, then we are Less than we could be. If we are Less than we could be, then we Feel inferior. If we set ideals too High, then we Feel inferior.
7. For each of the following sentences , identify the propositions, and symbolize:
Source: <https://philosophy.lander.edu/logic/structure.html>
- The graphical method of solving a system of equations is an approximation, since reading the point of intersection depends on the accuracy with which the lines are drawn and on the ability to interpret the coordinates of the point.
8. For each of the following sentences , identify the propositions, and symbolize:
Source: <https://philosophy.lander.edu/logic/structure.html>
- The Roman Empire crumbled to dust because it lacked the spirit of liberalism and free enterprise. The policy of interventionism and its political corollary, the Fuhrer principle, decomposed the mighty empire as they will by necessity always disintegrate and destroy any social entity.
9. For each of the following sentences , identify the propositions, and symbolize:
Source: <https://courses.lumenlearning.com/ivytech-comm101-master/chapter/chapter-6-logic-and-the-role-of-arguments/>
- Americans today are some of the unhealthiest people on Earth. It seems like not a week goes by without some news story relating how we are the fattest country in the world. In addition to being overweight, we suffer from a number of other health problems. When I was conducting research for my speech, I read somewhere that heart attacks are the number one killer of men and the number two killer of women. Think about that. My uncle had a heart attack and had to be rushed to the hospital. They hooked him up to a bunch of different machines to keep him alive. We all thought he was going to die. He's ok now, but he has to take a bunch of pills every day and eat a special diet. Plus he had to pay thousands of dollars in medical bills. Wouldn't you like to know how to prevent this from happening to you?