Guía de ejercicios Tablas de Verdad

```
1. NOT ( V OR F XOR F OR V OR V OR V XOR F )
NOT ( V OR F XOR F OR V OR V OR V XOR F )
NOT ( V XOR F OR V OR V OR V XOR F )
NOT ( V OR V OR V OR V XOR F )
NOT ( V OR V OR V XOR F )
NOT ( V OR V XOR F )
NOT ( V XOR F )
NOT (V)
2. F AND F AND F AND F AND NOT(F AND F AND F AND F AND F AND F AND F)
F AND F AND F AND F AND NOT( F AND F
F AND 
F AND F AND F AND F AND NOT(F AND F AND F AND F AND F)
F AND F
F AND F AND F AND F AND NOT( F AND F AND F)
F AND F AND F AND F AND NOT(FANDF)
F AND F AND F AND NOT(F)
F AND F AND F AND V
F AND F AND F AND V
F AND F AND V
F AND V
```

```
3. NOT(FAND FAND VAND VAND NOT(FAND VAND F) AND VAND NOT(VAND FAND F))
NOT(FAND FAND VAND VAND NOT(FAND VAND F) AND VAND NOT(VAND FAND F))
NOT(FAND FAND VAND VAND NOT(FAND F) AND VAND NOT(VAND FAND F))
NOT(FAND FAND VAND VAND NOT(F) AND VAND NOT(VAND FAND F))
NOT( F AND F AND V AND V AND V AND NOT( V AND F AND F))
NOT( F AND F AND V AND V AND V AND NOT( F AND F ) )
NOT(FAND FAND VAND VAND VAND VAND NOT(F))
NOT(FANDFANDVANDVANDVANDVANDV)
NOT(FAND V AND V AND V AND V AND V)
NOT(FAND V AND V AND V AND V)
NOT(FAND VAND VAND V)
NOT(FAND V AND V)
NOT(FANDV)
NOT(F)
4. NOT( NOT( F AND V XOR F ) AND V XOR F OR V ) AND F XOR V AND F
NOT( NOT( F AND V XOR F ) AND V XOR F OR V ) AND F XOR V AND F
NOT( NOT( F XOR F ) AND V XOR F OR V ) AND F XOR V AND F
NOT( NOT( F ) AND V XOR F OR V ) AND F XOR V AND F
NOT( V AND V XOR F OR V ) AND F XOR V AND F
NOT( V XOR F OR V ) AND F XOR V AND F
NOT( V OR V ) AND F XOR V AND F
NOT(V) AND F XOR V AND F
F AND F XOR V AND F
F XOR V AND F
F XOR F
F
```

```
5. NOT( NOT( F XOR V XOR V XOR F XOR V XOR F XOR V XOR F AND V AND F AND V AND F ) )
NOT( NOT( F XOR V XOR F XOR V XOR F XOR V XOR F AND V AND F AND V AND F))
NOT( NOT( F XOR V XOR F XOR V XOR F XOR V XOR F AND F AND V AND F ) )
NOT( NOT( F XOR V XOR F XOR V XOR F XOR V XOR F AND V AND F ) )
NOT( NOT( F XOR V XOR V XOR F XOR V XOR F XOR V XOR F AND F ) )
NOT( NOT( F XOR V XOR V XOR F XOR V XOR F XOR V XOR F) )
NOT( NOT( V XOR V XOR F XOR V XOR F XOR V XOR F) )
NOT( NOT( F XOR F XOR V XOR F XOR V XOR F) )
NOT( NOT( F XOR V XOR F XOR V XOR F) )
NOT( NOT( V XOR F XOR V XOR F) )
NOT( NOT( V XOR V XOR F) )
NOT( NOT( F XOR F) )
NOT( NOT( F) )
NOT(V)
6. V AND F XOR V OR NOT( NOT( F AND V AND F AND V AND NOT( NOT( V AND V AND V ) ) AND
V AND F OR V AND F ) AND V )
V AND F XOR V OR NOT( NOT( F AND V AND F AND V AND NOT( NOT( V AND V AND V ) ) AND V
AND F OR V AND F ) AND V )
V AND F XOR V OR NOT( NOT( F AND V AND F AND V AND NOT( NOT( V AND V ) ) AND V AND F OR
V AND F ) AND V )
V AND F XOR V OR NOT( NOT( F AND V AND F AND V AND NOT( NOT( V ) ) AND V AND F OR V AND
F) AND V)
V AND F XOR V OR NOT( NOT( F AND V AND F AND V AND NOT( F ) AND V AND F OR V AND F ) AND
V)
V AND F XOR V OR NOT( NOT( F AND V AND F AND V AND V AND F OR V AND F) AND V)
V AND F XOR V OR NOT( NOT( F AND F AND V AND V AND F OR V AND F) AND V)
V AND F XOR V OR NOT( NOT( F AND V AND V AND F OR V AND F ) AND V )
V AND F XOR V OR NOT( NOT( F AND V AND V AND F OR V AND F ) AND V )
V AND F XOR V OR NOT( NOT( F AND V AND F OR V AND F ) AND V )
```

V AND F XOR V OR NOT(NOT(F AND F OR V AND F) AND V)

V AND F XOR V OR NOT(NOT(F OR V AND F) AND V)

V AND F XOR V OR NOT(NOT(F OR F) AND V)

V AND F XOR V OR NOT(NOT(F) AND V)

V AND F XOR V OR NOT(V AND V)

V AND F XOR V OR NOT(V)

V AND F XOR V OR F

F XOR V OR F

7. V AND NOT(V AND F OR V AND F) OR NOT(F XOR V OR F AND V OR F) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND NOT(V AND F OR V AND F) OR NOT(F XOR V OR F AND V OR F) XOR NOT(F AND V OR F)
OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND NOT(F OR V AND F) OR NOT(F XOR V OR F AND V OR F) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND NOT(F OR F) OR NOT(F XOR V OR F AND V OR F) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND NOT(F) OR NOT(FXOR V OR F AND V OR F) XOR NOT(FAND V OR F) OR NOT(FOR V OR FXOR V) AND V AND FOR NOT(V AND FAND V AND F)

V AND V OR NOT(F XOR V OR F AND V OR F) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR NOT(F XOR V OR F OR F) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR NOT(V OR F OR F) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR NOT(V OR F) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR NOT(V) XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR NOT(F AND V OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR NOT(F OR F) OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR NOT(F) OR NOT(FOR V OR F XOR V) AND V AND FOR NOT(V AND F AND V AND F)

V AND V OR F XOR V OR NOT(F OR V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR V OR NOT(V OR F XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR V OR NOT(V XOR V) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR V OR NOT(F) AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR V OR V AND V AND F OR NOT(V AND F AND V AND F)

V AND V OR F XOR V OR V AND V AND F OR NOT(F AND V AND F)

V AND V OR F XOR V OR V AND V AND F OR NOT(F AND F)

V AND V OR F XOR V OR V AND V AND F OR NOT(F)

V AND V OR F XOR V OR V AND V AND F OR V

V OR F XOR V OR V AND V AND F OR V

V OR F XOR V OR V AND F OR V

V OR F XOR V OR F OR V

V XOR V OR F OR V

F OR F OR V

F OR V

٧

8. NOT(NOT(V OR F OR V AND V XOR V) AND F AND V AND F OR NOT(NOT(V OR F OR V AND V XOR V AND F AND V XOR F)) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(NOT(V OR F OR V AND V XOR V) AND F AND V AND F OR NOT(NOT(V OR F OR V AND V XOR V AND F AND V XOR F)) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(NOT(V OR F OR V AND V XOR V) AND F AND V AND F OR NOT(NOT(V OR F OR V XOR V AND F AND V XOR F)) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(NOT(V OR F OR V AND V XOR V) AND F AND V AND F OR NOT(NOT(V OR F OR V XOR F AND V XOR F)) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(NOT(V OR F OR V AND V XOR V) AND F AND V AND F OR NOT(NOT(V OR F OR V XOR F XOR F)) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

```
NOT( NOT( V OR F OR V AND V XOR V ) AND F AND V AND F OR NOT( NOT( V OR V XOR F XOR F ) )
OR NOT( V OR F OR V AND V XOR V AND F AND V XOR F ) )
NOT( NOT( V OR F OR V AND V XOR V ) AND F AND V AND F OR NOT( NOT( V XOR F XOR F ) ) OR
NOT( V OR F OR V AND V XOR V AND F AND V XOR F ) )
NOT( NOT( V OR F OR V AND V XOR V ) AND F AND V AND F OR NOT( NOT( V XOR F ) ) OR NOT( V
OR F OR V AND V XOR V AND F AND V XOR F ) )
NOT( NOT( V OR F OR V AND V XOR V ) AND F AND V AND F OR NOT( NOT( V) ) OR NOT( V OR F OR
V AND V XOR V AND F AND V XOR F))
NOT( NOT( V OR F OR V AND V XOR V ) AND F AND V AND F OR NOT( F ) OR NOT( V OR F OR V AND
V XOR V AND F AND V XOR F))
NOT( NOT( V OR F OR V XOR V ) AND F AND V AND F OR NOT( F ) OR NOT( V OR F OR V AND V XOR
V AND F AND V XOR F))
NOT( NOT( V OR V XOR V ) AND F AND V AND F OR NOT( F ) OR NOT( V OR F OR V AND V XOR V
AND F AND V XOR F))
NOT( NOT( V XOR V ) AND F AND V AND F OR NOT( F ) OR NOT( V OR F OR V AND V XOR V AND F
AND V XOR F))
NOT( NOT(F ) AND F AND V AND F OR NOT( F ) OR NOT( V OR F OR V AND V XOR V AND F AND V
XOR F))
NOT( V AND F AND V AND F OR NOT( F ) OR NOT( V OR F OR V AND V XOR V AND F AND V XOR F ) )
NOT( V AND F AND V AND F OR V OR NOT( V OR F OR V AND V XOR V AND F AND V XOR F ) )
NOT( V AND F AND V AND F OR V OR NOT( V OR F OR V XOR V AND F AND V XOR F ) )
NOT( V AND F AND V AND F OR V OR NOT( V OR F OR V XOR F AND V XOR F ) )
NOT( V AND F AND V AND F OR V OR NOT( V OR F OR V XOR F XOR F ))
NOT( V AND F AND V AND F OR V OR NOT( V OR V XOR F XOR F ) )
NOT( V AND F AND V AND F OR V OR NOT( V XOR F XOR F ) )
NOT( V AND F AND V AND F OR V OR NOT( V XOR F ) )
NOT( V AND F AND V AND F OR V OR NOT( V ) )
NOT( V AND F AND V AND F OR V OR F )
NOT(FAND V AND FOR V OR F)
NOT(FANDFORVORF)
NOT(FORVORF)
NOT( V OR F)
```

F

```
9. NOT( V AND F AND V AND F OR NOT( V AND F OR V XOR V AND F XOR V OR F ) OR NOT( V OR F OR V AND V XOR V AND F AND V XOR F ) )

NOT( V AND F AND V AND F OR NOT( V AND F OR V XOR V AND F XOR V OR F ) OR NOT( V OR F OR
```

V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR NOT(F OR V XOR V AND F XOR V OR F) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR NOT(F OR V XOR F XOR V OR F) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR NOT(V XOR F XOR V OR F) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR NOT(V XOR V OR F) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR NOT(F OR F) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR NOT(F) OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V OR F OR V AND V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V OR F OR V XOR V AND F AND V XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V OR F OR V XOR F AND V XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V OR F OR V XOR F XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V OR V XOR F XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V XOR F XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V XOR F))

NOT(V AND F AND V AND F OR V OR NOT(V))

NOT(V AND F AND V AND F OR V OR F)

NOT(FAND V AND FOR V OR F)

NOT(FANDFORVORF)

NOT(FORVORF)

NOT(V OR F)

F

```
10. NOT( NOT( NOT( NOT( V OR F XOR V AND F OR V AND F ) OR NOT( V AND F OR V ) OR F ) AND
V AND F) OR NOT( V AND F OR NOT(V AND F OR V XOR F) ))
NOT( NOT( NOT( NOT( V OR F XOR V AND F OR V AND F ) OR NOT( V AND F OR V ) OR F ) AND V
AND F) OR NOT( V AND F OR NOT(V AND F OR V XOR F) ))
NOT( NOT( NOT( NOT( V OR F XOR F OR V AND F ) OR NOT( V AND F OR V ) OR F ) AND V AND F )
OR NOT( V AND F OR NOT(V AND F OR V XOR F) ) )
NOT( NOT( NOT( NOT( V OR F XOR F OR F ) OR NOT( V AND F OR V ) OR F ) AND V AND F ) OR NOT(
V AND F OR NOT(V AND F OR V XOR F)))
NOT( NOT( NOT( NOT( V XOR F OR F ) OR NOT( V AND F OR V ) OR F ) AND V AND F ) OR NOT( V
AND F OR NOT(V AND F OR V XOR F)))
NOT( NOT( NOT( NOT( V OR F ) OR NOT( V AND F OR V ) OR F ) AND V AND F ) OR NOT( V AND F OR
NOT(V AND F OR V XOR F)))
NOT( NOT( NOT( NOT( V ) OR NOT( V AND F OR V ) OR F ) AND V AND F ) OR NOT( V AND F OR
NOT(V AND F OR V XOR F)))
NOT( NOT( NOT( F OR NOT( V AND F OR V ) OR F ) AND V AND F ) OR NOT( V AND F OR NOT(V AND
FORVXORF)))
NOT( NOT( NOT( F OR NOT( F OR V ) OR F ) AND V AND F ) OR NOT( V AND F OR NOT(V AND F OR V
XOR F)))
NOT( NOT( NOT( F OR NOT( V ) OR F ) AND V AND F ) OR NOT( V AND F OR NOT(V AND F OR V XOR
F)))
NOT( NOT( NOT( FOR F OR F ) AND V AND F ) OR NOT( V AND F OR NOT(V AND F OR V XOR F) ) )
NOT( NOT( NOT( FOR F ) AND V AND F ) OR NOT( V AND F OR NOT(V AND F OR V XOR F) ) )
NOT( NOT( NOT( F ) AND V AND F ) OR NOT( V AND F OR NOT(V AND F OR V XOR F) ) )
NOT( NOT( V AND V AND F ) OR NOT( V AND F OR NOT( V AND F OR V XOR F) ) )
NOT( NOT( V AND V AND F ) OR NOT( V AND F OR NOT(F OR V XOR F) ) )
NOT( NOT( V AND V AND F ) OR NOT( V AND F OR NOT( V XOR F) ) )
NOT( NOT( V AND V AND F ) OR NOT( V AND F OR NOT(V) ))
NOT( NOT( V AND V AND F ) OR NOT( V AND F OR F ) )
NOT( NOT( V AND F ) OR NOT( V AND F OR F ) )
NOT( NOT( F) OR NOT( V AND F OR F ) )
```

```
NOT( V OR NOT( V AND F OR F ) )

NOT( V OR NOT( F OR F ) )

NOT( V OR NOT( F ) )

NOT( V OR V )

NOT( V )
```