

**Symbolization and Translation Exercises (Solutions)**  
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1. Symbolize each of the following English sentences:

a. Some zebras are not mammals.  $(\exists x)(Zx \cdot \sim Mx)$

b. Something is orange.  $(\exists x)Ox$

c. All boxes are sturdy.  $(x)(Bx \supset Sx)$

d. Everything is blue.  $(x)Bx$

e. Some tigers are lions.  $(\exists x)(Tx \cdot Lx)$

f. Nothing is red.  $(x)\sim Rx$

g. Something is not purple.  $(\exists x)\sim Px$

h. No sores are gangrenous.  $(x)(Sx \supset \sim Gx)$

2. Translate the following symbolized expressions into English:

a.  $Tk$  (Keith is tall)

b.  $Dx$  (\_\_\_\_\_ is a dog)

c.  $(x)Cx$  (Everything is cool)

d.  $(\exists x)(Wx \cdot Kx)$  (Some Wisconsinites are killers)

e.  $\Phi x$  (\_\_\_\_\_ is \_\_\_\_\_)

f.  $(\exists x)Lx$  (Something is laconic)

g.  $(x)(Ex \supset Fx)$  (All elephants are fabulous)

h.  $Mn$  (Nick is a Moonie)

- i.  $(\forall x)(Gx \supset \sim Hx)$  (No giraffes are hilarious)
- j.  $(\forall x)\sim Zx$  (Nothing is a zebra)
- k.  $(\exists x)Ox$  (Something is outrageous)
- l.  $\Phi r$  (Ralph is \_\_\_\_\_)
- m.  $(\exists x)\sim Sx$  (Something is not sad)
- n.  $(\exists x)(Tx \cdot \sim Bx)$  (Some tyrants are not bitter)

Which of your translated propositions are true and which false? Which are neither true nor false?