1

In all cases we assume that the result it t.

a)

[Darth Vader]$_e$ [is [[the father of]$_{(e,e)}$ Luke$_e$]]$_{(e,t)}$

$$\text{father}(dw, l)$$

b)

[[Every]$_e$ Jedi$_{(e,t)}$] [has [a lightsaber]$_e$]$_{(e,t)}$

$$\forall x : \text{jedi}(x) \rightarrow \text{has}(x, l)$$

c)

[Padmé Amidala]$_e$ [is [the [[most$_{(((e,t),(e,t)),((e,t),(e,t)))}$ beautiful$_{((e,t),(e,t))}$] woman$_{(e,t)}$]] on Naboo$_e$]$_{(e,t)}$

$$\text{woman}(pa) \wedge \text{is\_on}(pa, nb) \wedge \forall w : (\text{woman}(w) \wedge \text{is\_on}(w, nb)) \rightarrow \text{more\_same\_beautiful}(pa, w)$$

2

2.1

a)

$$V_M(\text{anakin}) = e_1, \ V_M(\text{yoda}) = e_2, \ V_M(\text{padme}) = e_3,$$

b)

$$V_M(\text{jedi}) = [e_1 \rightarrow 1, e_2 \rightarrow 1, e_3 \rightarrow 0]$$

c)

$$V_M(\text{help}) = [$$
$$e_1 \rightarrow [e_1 \rightarrow 0, e_2 \rightarrow 1, e_3 \rightarrow 1],$$
$$e_2 \rightarrow [e_1 \rightarrow 1, e_2 \rightarrow 0, e_3 \rightarrow 1],$$
$$e_3 \rightarrow [e_1 \rightarrow 0, e_2 \rightarrow 0, e_3 \rightarrow 0]$$
$$]$$

2.2

a)

$$[\![\text{help}(\text{padme})]\!]^{M,g} = [\![\text{help}]\!]^{M,g}([\![\text{padme}]\!]^{M,g}) = [e_1 \rightarrow 1, e_2 \rightarrow 1, e_3 \rightarrow 1]$$

b)

$$[\![\forall x \text{help}(x)(x) \rightarrow \neg \text{jedi}(x)]\!]^{M,g} = 1$$

c)

$$[\![\forall F \exists x : F(x)]\!]^{M,g} = 1$$