(6.)

c.)

P	q	P→q	(P∧(P→q))	(P∧(P→q))→q
T	T	T	T	T
T	F	F	F	T
F	T	T	F	T
F	F	T	F	T

Dæmið sem vantaði í bókina hjá mér:

$(P \wedge (P \to q)) \to q \equiv \neg(P \wedge (\neg P \wedge \to q)) \to$ (Tafla 7 regla 7)

$\equiv (\neg P \vee (P \wedge \neg q)) \vee q$ (de morgan)

$\equiv ((\neg P \vee P) \wedge (\neg P \vee \neg q)) \vee q$ (Distributive laws)

$\equiv (T \wedge (\neg P \vee \neg q) \vee q)$ (Negation laws)

$\equiv (\neg P \vee \neg q) \vee q)$ (identity laws)

$\equiv \neg P \vee (\neg q \vee q)$ (Associative laws)

$\equiv \neg P \vee T$ (Negation laws)

$\equiv T$ (Domination laws)

(24.)

P	q	Nand
T	T	F
T	F	T
F	T	T
F	F	T

(26.)

P	q	Nor
T	T	F
T	F	F
F	T	F
F	F	T

(6.) C(x) = x has a ~~dog~~ Cat ∧ = and

D(x) = x has a dog ∨ = or

F(x) = x has a farret

a.) $\exists x (C(x) \wedge D(x) \wedge F(x))$ b.) $\forall x (C(x) \vee D(x) \vee F(x))$

c.) $\exists x (C(x) \wedge F(x) \neg D(x))$ d.) $\neg \exists x (C(x) \wedge D(x) \wedge F(x))$

e.) $(\exists x C(x)) \wedge (\exists x D(x)) \wedge (\exists x F(x))$