(e) $(d+bc')' + (ge+f) + (d+bc')$ Given

Substitution

$H' + (ge+f) + H$ $H = d+bc'$

$H' + H + (ge+f)$ Communative

$\boxed{ge+f}$ Complementarity

(2) (a) $(ab+c)(b+c'd)$ Given

$abb + ac'd + cb + cc'd$ Distributive

$ab + ac'd + cb + cc'd$ Idempotency

$\boxed{ab + ac'd + cb + d}$ Complementarity

(b) $x' + x(x+y')(y+z')$ Given

$x' + (xx + xy')(y+z')$ Distributive

$x' + (x + xy')(y+z')$ Idempotency

$x' + xy + xz' + xy'y + xy'z$ Distributive

$x' + xy + xz' + x + xy'z$ Complementarity

$x' + x + xy + xz' + xy'z$ Communative

$\boxed{xy + xz' + xy'z}$ Complementarity