convert sentences and gral into relational logic sentences and convert them into clausal torm:

- 1) $\forall x (cr Y(x) =) Hr(x))$ = \(\xi Tcr Y(x), Hr(x)\)
- 2) $\forall x \forall y \forall z ((com(y) = |NVEST(x,y)) = ((FRC(z) = |TINVEST(x,z)))$ = { com(y), \(\text{FRC(z)}, \(\text{INVEST(x,z)} \) \) and

 = \(\text{ETINVEST(x,y)}, \(\text{TFRC(x)}, \(\text{INVEST(x,z)} \) \)

 = \(\text{ETINVEST(x,y)}, \(\text{TFRC(x)}, \(\text{INVEST(x,z)} \) \)
- 3) Yx Yy (ANXIETY(X) =) (HR(y) =) TINVEST(X,Y)))
 = & TANXIETY(X), THR(y), TINVEST(X,Y))
- 4) tx (INVESTIAION, Y) = ((com(x) \ 7CRY(x)) V))
 - = ¿TINVEST (Alan,x), com(x)3 and ¿TINVEST (Alan,x), TC=~ (x)3 " ¿TINVEST (Alan,x), CRY(x)3 " ¿TINVEST (Alan,x), TCRY(x)3
 - Gool: YZ (ANXIFTY(Alon) =) (FRC(Z)=)TINVEST(Alon, Z)))
 = { 7ANXIFTY(Alon), 7FLC(Z), 7INVEST(Alon, Z)}

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1) &TCRY(x), HR(x)} Premise
2) & com(y), TFRE(E), TINVEST (x,7)3 Premise
3) & TERC(Z), TINVEST (x,Z)3 Premise
4) ETANXICTY (x), THR(y), TINVEST(x,y)} remise
5) & TINVEST (Alon, X), com (X)} Premise
6) & TINVEST (Alox,x), TCOM (x) ]
7) & TINVEST (Alm, x), CRY(x)]
 8) & TINVEST (Alan, X), TCRY(X)] "
 9) ¿TANXIETY (Alan), TINVEST (Alon, y),
THR(y), TOM (XL) 3 (4,6) EXEATON 3
 10/ ETANKIETY (Alon), TINVEST (Alon, 7),
THR (Z), TFRC(Z) } (2,B) Eyez}
 11) {TANXIETY (Alan), TINVEST (Alan, Z),
TERC(Z), TCRY(Z)} (1,10) {x=Z}
 12) ¿TANXIETY (Alon), TINVEST (Alon, Z), TERC(Z) ]
    ((7,11) EXEZ)

J= YZ (JANXIFTY (Alon) VJINVEST (Alon, Z)V

JERC(Z))
    = YZ (ANXIETY (Alon) =) (FRC(Z) =) 7 INVESTIAION,)
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