TD resolution A= Vx. 3g. 3z. (R(x,y) ~ 5(y,z)) @ Exercice S: B. = (Hz. (3y. R(x,y))) n (Hy (3z. 5(y, z))) 1) Mise sous forme preveze de 1A On doit prover que B+A, donc que Bn1A et inrobirfishe. 1A = 2(\forall x. 3g. 32. (R(x,g) \sigma S(g, 2))) = 3x. 4y. 4.2 (IR(x,y) x 75(y,2)). Skolémisation de 1A s(7A) = s(Foc. yy. Y. 2 (7R(x,y) v, 75(y,2))) = S(Vy. Vz. (7R(x,y) v 7S(y, z)) [a /x]) parde towart] =5(\forall y. \forall z. (1R(a,y) v75(y,z))) =5(7R((a,y)~7S(y,z)) = h(.7R(a,y)) vh(25(y, 2)) =75(R(a,y)) v75(S(y,z)) $= 1 R(a, y) \times 1 S(y, z)$ 1) Mise sois forme préneze de B B = (\frac{1}{2}. R(x,y))) \(\frac{\frac{1}{2}. S(\frac{1}{2}. S(\frac{1}{2}. S(\frac{1}{2}. S(\frac{1}{2}))))}{\frac{1}{2}} \) = Yx. Yt. Jy. Jz. R(x,y) n S(t,z) 2) Skdémisation de B s(B) = s(\frac{\forall x. \forall t. \forall y. \forall z. \R(x,y)nS(t,e)) = s(R(x,y) , S(t, 2)[f(y)/y][g(2)/2]) $= s(R(x,F(y)) \Delta S(t,g(z)))$ = s(R(x,f(y))) n s(S(E,g(x)))

 $= R(x,F(y)) \cap S(t,g(z))$