```
0 ((cury map) +) ((cury map) g1) == ((cury map) (0 + g))
    Must Prove:
    ((o (luny nap)f) ((corry nap) g)) xs)==(1(corry map) (of g) xs)
        (((cury map) +) (cury hop) (0 xs))
    For base case where xs = ()
        (map f (map y E))
LHS:
                 Sab Statute ?
               (: f (null? ())
                          ( 9 (sor'()) (map g(cdr(1)))
                    null? - Enpty lang
                       (uns (9(con'()))(-non 9 (cdr'()))))
RNS: (nap(0 49) 1)
           Esubstitutes
if [null? ()
               (uns ((ofg) (car()) (nap (ofg) (d, () 11)
                Ethall empty land
```

()
(cons ((o (y) (can (w)) (map (o sy) (dr (v))))
-if #+ lon
LHS and RHS both equal 'll
Ous on First posti state
Inductive step prove for any xs, where xs = (cons y ys)
LHS (map f(map g xs)
{ substitute3
map f (if hull? xs)
()
(cons (g (conxs)) (map g (cdr xs)))
{ Sub 45=(6015) Y 5) }
hopt lif H+
(c)
(1005 (y (Con(consy YD) (mop (g (Cor (consy XS)))
map + cons (g (confrons x xs)) (nap g(confrons x ys)))
map + lens (gleans + 1st - p gleanter + y s
tons (9 y) (map g (cdr(lons y ys)))
= \(\{\langle \text{dr, (ans long)}\)
map + cons (ax(map a x s)
(if (null? (ions(g v) (nup g ys)))
(1)
(cans (f (con (cons (g y) (min g ys)))
(map f (Idr(cons (9x) (map 9xs)))
= Enull was land
(if # <b>f</b>
(int (t (ion (ions (g y) (map 2 y ())))
( -1 / 1 / ( ant / 4 V ) ( harp ) + Y ( ) )

(cons (9 (con(cos(s, y) (mop g ys)))  (cons (9 (con(cos(s, y) (mop g ys))))  (cons (4 (con))  (cons (6 (con))  (cons (6 (con))  (cons (6 (con)) (mop g ys)))  (cons (6 (con)) (mop g ys))  (cons (6 (con)) (mop g ys)) (mop g g ys))  (cons (6 (con)) (mop g g ys))  (cons (6 (con)) (mop g g ys)) (mop g g ys))  (cons (6 (con)) (mop g g g g g g g g g g g g g g g g g g g		
( rep f ((dr/(ens(94)(arggys))))  = \( \{ (44)\} \\		= i4 # f lan
( rep f ((dr/(ens(94)(arggys))))  = \( \{ (44)\} \\		(cons (9 (cons(gy) (map gys)))
[cons (6 (9x)) (nep 9x))  = { con-(on) { los }  (cons (6 (9x)) (nep 9x)))  = induction hyperbox;  (cons (f (9x)) (nep face) (solor x)))  = induction hyperbox;  (if (not) (los facor xs)) (nep face) (solor x)))  = indi-cons los  (if #f  (cons (los facor xs)) (nep face) (solor x))  = indi-cons los  (if #f  (cons (los facor xs)) (nep face) (solor x)  = fact to face (sons xys)) (nop los face) (solotor xys)  = facor cons los face  (sons (los face) (sons yys)) (sons (object face) (solotor xys))  = face cons los face  (sons (los face) (sons face) (solotor xys))  = face cons los face  (sons (los face) (sons face) (solotor xys))  = face cons los face  (sons (los face) (sons face) (sons xys))  = face cons los face  (sons (los face) (sons face) (sons xys))  = face cons los face  (sons (los face) (sons face) (sons xys))  = face cons los face  (sons (los face) (sons xys)) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys)) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys)) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys)) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys)) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys)) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys)) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys) (nep (object) xys)  = face cons los face  (sons (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face cons los face  (los face) (sons xys) (nep (object) xys)  = face	<del></del>	(nop f (ida/cons(gy)(nygys))))
(mp f ((de((ous(ax) (trap a ys)))))  = { the (ons (a (ay)) (nep a ys)))}  = { the (ons (a (ay)) (nep a ys))}  = { the (ons (f (ay)) (nep a fa))}  (tens (f (ay)) (nep a fa) ys)  = { tens (f (ay)) (nep a fa) ys)  (if (nall x 1)  (ions ((a fa) (ton x 1)) (nep a fa) (the x 2)))  = hull-cons lan  (if #f  (i)  (tens ((a fa) (ton (tens x x y)))) (nep (a fa)) (the famous x ys))  - { if #f (tens ((a fa) (ton (tens x y ys))) (nep (a fa)) (the famous x ys))}  - { tens ((a fa) (ton (tens y ys)) (tons a fa fa) (the famous x y y)) (nep (a fa) y y)  = { tens (f (a fa) y ) (nep (a fa) y y)  - apply (a passe  (tens (f (ay)) (nep (a fa) y y)  - apply (a passe  (tens (f (ay)) (nep (a fa) y y)		= {con-(uns /on3
[map & (lde(lons( ax) (trap g ys)))]  = { the (ons (a (ax)) (nep g ye))}  = induction hyperbus;  ( cons (t (ax)) (neplaty) ys)  = { cons (t (ax)) (neplaty) ys}  = { cons (total (ax xs)) (neplaty) (the xs))}  = null-cons lam  (if #f  ()  (cons (lo (g) (con (cons x xs))) (nep (atg) (ldd (mx xs)))  = for (long (lo (ax)) (con (cons x xs))) (nep (atg) (ldd (mx xs)))  = for (long (lo (ax)) (con (cons x xs))) (nep (atg) (ldd (mx xs)))  = for (long (lo (ax)) (con (cons x xs))) (nep (atg) (ldd (mx xs)))  = for (long (lo (ax)) (con (cons x xs))) (nep (atg) (ldd (cons x xs)))  = for (long (lo (ax)) (long (ax) (long (ax)))  = for (long (lo (ax)) (long (atg) (xs))  = app (x (ax)) (nep (atg) (xs))  = app (x (ax)) (nep (atg) (xs))		(cons (f (gy))
(1 ons (6 (444)) (asp g 41))  = induction by perturing  (cons (6 (444)) (asplated) ys)  = (cons (6 (444)) (asplated) ys)  = (cons (6 (444)) (asplated) (ide x1))  (cons (6 (444)) (asplated) (ide x1))  = indi-cons law  (if #f  (ins (6 (4)) (con (cons x x5))) (asplated) (ide x1))  = 4 cons (6 (4) x5) (asplated x5) (ide (6 x5))  = 4 cons (6 (4) x5) (asplated x5) (ide (6 x5))  = 4 cons (6 (4) x5) (asplated x5) (ide (6 x5) x5))  = 4 cons (6 (4) x5) (asplated x5) (x5)  = 4 cons (6 (4) x5) (asplated x5) (x5)  = 4 cons (4 (4) x5) (asplated x5) (x5)  = 4 cons (4 (4) x5) (asplated x5) (x5)  = 4 cons (4 (4) x5) (asplated x5) (x5)  = 4 cons (4 (4) x5) (asplated x5) (x5)  = 4 cons (4 (4) x5) (asplated x5) (x5)		(no + ((dr((ox((ax) (map q ys)))))
(1 ons (6 (44)) (nep g 42))  = induction hypother;  ( cons (f (44)) (nep (a 64)) ys)  = (cons (f (44)) (nep (a 64)) ys)  = (cons (state)  ( if (nn) ( cons lan  ( if #f  ( )  ( cons (lo 6) (con (cons x ys))) (nep (a 64) (cod (cons ys))  - ( y # f f f f f f f f f f f f f f f f f f		= Eldr-cong low?
= induction hypethis;  ( cons (f (44)) (mople (43) ys)  = (cons (f (44)) (mople (43) ys)  = (cons (fo (4) xs)) (maple (49) (color xs)))  = (cons (fo (4) (cons xs)) (maple (49) (color xs)))  = (cons (fo (4) (cons xs))) (maple (43) (color xs))  = (cons (f (4) xs)) (cons (cons xs))) (cons (cons xs))  = (cons (f (4) xs)) (maple (5) xs)		
### (rup (0 (3) &5)  = {(ulstidit)}  (it (mill x 1)  (ions (lo (q (um x s)) (rup (0 (9) (lod x (1))))  = mult-cons law  (it #f  (i)  (cons (lo (q) (un (con(x x y)))) (rup (0 (0)) (c) ((lon x (1)))  = q, f # f how  (cons (lo (q) (con (con(x y x (1)))) (rup (0 (0)) (c) ((lon x (1))))  = q, f f f how  (cons (lo (q) (con (con(x y (1)))) (cons (of y) (cons (of y) (con (con(x y (1))))))  = q, f f f f f f f f f f f f f f f f f f		
FHS: (rap (0 fg) xs)  = {substitut?  (it (ralle x 1)  (ons (lofg(com xs1)(rep(0 fg) (lobor xf)))  = rall-cons lan  (it #f  (j)  [cons (lofg)(con (cons x ys))) (rep (0 fg) (lofglowyg)  = 7, ff ff long  (cons (lofg) (san (cons yys))) (cons (ofg) (lofglowyg)  = {con cons land  (cons (tofg) y) (rop (ofg) (con (cons y ys)))  = {con cons land  (cons (tofg) y) (rapp (ofg) (xs))  = apply compage  (cons (f (4 y)) (rapp (ofg) ys))  = apply compage  (cons (f (4 y)) (rapp (ofg) ys))		(cons(f(gy))(mopo(a69)ys)
= (cut stituti)  (it (m))(xx)  (cons (lotg(cun xs))(rep(otg) (idm xs)))  = multicons lain  (it #f  (cons (lotg)(cun (cons x xs)))(rep (otg) (idd(con xg))  - 5, 4 # 6 for 3  (cons (lotg) (can (cons x xs)))(rep (otg) (idd(con xg))  - 5, 6 for cons lains  (cons (lotg) y) (rep (otg) (idn (cons x xs)))  = 6 for cons lains  (cons (to (g) x) (rep (otg) xs))  = apply compass  (cons (4 (9x)) (rep(otg) xs))  - apply compass  (cons (4 (9x)) (rep(otg) xs)		<u> </u>
= {(itstituti}  (it (m))( x 1)  (ions (lota(con xs)) (replates) (con xs)))  = null-cons lam  (it #f  (i)  (cons (lota)(con (cons x xs))) (replates) (codion xy)  - 5 if # 6 long  (cons (lota) (con (cons x xs))) (replates xxs))  - (cons (lota) (con (cons xxs))) (replates xxs))  - (cons (lota) x) (replates) (cons xxs))  = (cons (cons (a) x) (replates) (xs)  - (cons (tota) x) (replates) (xs)		F173. (map (0 fg) xs)
(it (mill x s)  (cons (lota (con x s)) (neplota) (con x s))  = mill-cons lam  (it #f  (cons (lota) (con (cons x y s))) (neplota) (coddion x y s))  = 5,4 + 6 tong  (cons (lota) (con (cons y y s))) (consteta) (cons (lota) (cons (cons y y s)))  = 5 tor cons law;  (cons (to 4 g) y) (noplota) (codr (cons y y s)))  = 6 con cons law;  (cons (to 4 g) y) (noplota) ys)  - apply compage  (cons (4 (g y y)) (neplota) ys)		100 100 100 100 100 100 100 100 100 100
(1)  (cons (lotg(con xss)(replateg) (color xss)))  = hull-cons law  (if #f  (ins (lotg)(con (sens x xs))) (rep (ota) (cold (sens xys)))  - 5; # # f tong  (sens (lotg) (san(sens xys))) (reps (ota) (cons xys))  - 6; **cons law;  (cons (totg) Y) (rep (ota) (cold (cons xys)))  = (cons (totg) Y) (rep (ota) (cold (sens xys)))  - (cons (totg) Y) (reps (ota) (sens xys))		
= hull-(ens lam  (it #f  (i)  [cons [(o (g)[con (cons x ys))](n-go (o to))(cd(cons xys))  - 2, # # f ton3  (cons [(o (g) (con( cons yys)))(cons(-bg))(cdn(cons yys)))  - (cons ((o (g) y) (nop (o (g) (cdn(cons y ys)))  - (cons ((o (g) y) (nop (o (g) ys)))  - (cons (((o (g) y) (nop (o (g) ys)))  - apply compose  [cons (((o (g) y) (nop (o (g) ys)))  - apply compose  [cons (((o (g) y) (nop (o (g) ys)))  - apply compose  [cons (((o (g) y) (nop (o (g) ys)))  - apply compose  [cons ((((o (g) x) (nop (o (g) ys))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x)))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x)))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x)))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x)))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x)))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x)))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x))))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x))))))  - (((o (g) x) (nop (o (g) x) (nop (o (g) x))))))))))))))))))))))))))))))))))		
= hull-cons law  (if #f  (i)  [cons ((o fg)[con (cons x ys)))(n-go (o fg)(cod font xys))  = 5, if # f low  (cons ((o f g) (con (cons yys)))(cons(o fg) fide fions yys))  = 6 con cons law;  (cons ((o f g) y) (nop (o fg) (con (cons y ys)))  = 6 con cons law;  (cons ((to (g) y) (nop (o fg) ys))  = apply compose  (cons (f (gy)) (nop (o fg) ys))  - apply compose  (cons (f (gy)) (nop (o fg) ys))		( cons (lotg(con xs)) (replate) (colo xc))
(if #f  (cons (lo kg)(con (cons x ys)))(n op (oto)(cod (cons yg))  - 5, 4 # 4 for 3  (cons (lo kg) (con (cons x ys))) (cons (oto) (cod (cons yys)))  - 5 con cons laws  (cons (to kg) y) (nop (o kg) (cod (cons y ys)))  = (cons (to kg) y) (nop (o kg) ys))  - apply compose  (cons (x (gy)) (nop (o kg) ys))  - apply compose  (cons (x (gy)) (nop (o kg) ys))		
(1)  (cons ((o kg)(con (cons x ys)))(n-op (o to))(cdd(on) ygs)  - 5; + + + tong  (cons ((o kg) (can(cons yys))) (cons(o kg) (cdn(cons yys)))  - 6; con cons (and)  (cons(to kg) y) (nop (o kg) (cdn(cons y ys)))  = (cons ((to kg) y) (napp(o kg) ys))  - app(y compose  (cons (x (gy)) (napp(o kg) ys))  - app(y compose  (cons (x (gy)) (napp(o kg) ys))		
(cons (lot g) (sar (sons yys))) (constates yys))  = { tor - cons laws}  ( tons (tot g) y) (nop to tg) (tdr (tons y ys)))  = { tor - tons laws}  (tons (to (g) y) (map(o (g) ys))  - apply compase  (tons (\$ (9 y)) (map(o \$ 2) ys))  - (tons (\$ (9 y)) (map(o \$ 2) ys))		
(cons (lot g) (sar (sons yys))) (constates yys))  = { tor -tons laws}  (tons (tot g) y) (nop to tg) (tdr (tons y ys)))  = { tor -tons laws}  (tons (to (g) y) (naplo (g) ys))  = apply compase  (tons (\$ (9 y)) (naplo \$ (2) ys))  - apply compase  (tons (\$ (9 y)) (naplo \$ (2) ys))	<u> </u>	(cons (lo Eg)/con (cons x ys)))(nop (of a) (coldinary)
(cons (lot g) (sar(tons yys))) (cons(oty) (idr/tons yys))  = { tor - cons law?  (cons(tot g) y) (rop (oty) (idr/tons y ys)))  = { tor - (ons law?  (tons ((to (y) x) (map(o (s) ys)))  - apply compose  (cons (f (g y)) (map(o f 2) ys))  LHS = RHS + hus by induction the		-5.64618
$= \frac{10r - cons \ laws}{(cons(t \circ f \circ g) + f) \cdot (cons f \circ f \circ g) \cdot (cons f \circ g)}$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f) \cdot (cons f \circ g) \cdot (cons f \circ g)}$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons(t \circ f \circ g)}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons(t \circ f \circ g)}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons(t \circ f \circ g)}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons(t \circ f \circ g)}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= \frac{10r - cons(t \circ f \circ g)}{(cons(t \circ f \circ g) + f)} \cdot (cons(t \circ f \circ g) + f)$ $= 10r - cons(t$		1/1 town
$= \frac{10r - tons \ laws}{(tons(tofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (s) Ys)}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (s) Ys)}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons \ laws}{(tons (tlofg) Y) (nop fofg) (tdr(tons Y Y)))}$ $= \frac{10r - tons (tons (tons Y) Y) (nop fofg) (tdr(tons Y Y)))}{(tons (tlofg) Y) (tons (tons Y) Y)}$ $= \frac{10r - tons (tons (tons Y) Y) (nop fofg) (tdr(tons Y Y))}{(tons (tons (tons Y) Y) (tons (tons Y) Y)}$ $= \frac{10r - tons (tons (tons Y) Y) (nop fofg) (tons (tons Y) Y)}{(tons (tons (tons Y) Y) (tons (tons Y) Y)}$ $= \frac{10r - tons (tons (tons Y) Y) (nop fofg) (tons (tons Y) Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons (tons Y) Y) (nop fofg) (tons (tons Y) Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons (tons Y) Y) (nop fofg) (tons Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y) (tons (tons Y) Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y) (tons (tons Y) Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y) (tons (tons Y) Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y) (tons (tons Y) Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y) Y)}$ $= \frac{10r - tons (tons Y)}{(tons (tons Y)}$		(1 1 ( 1 4 a ) ( c - 1
(cons(tot g) y) (nop (o tg) (tdr (cons y x s)))  = {con-(ons laws (cons (tlo (g) y) (nap(o (g) xs))  - apply compose (cons (£ (9 x)) (nap(o tg) xs))  LHS = RHS + hus by induction the		( sout ( and Add) ( out ( out ) ( lough de de )
= { con-(ons low)   (nap(o (s) ys))   (cons (t(o (g) y))   (nap(o (s) ys))   (cons (\$ (9 y))   (cons (		
(cons ((( o (y) x) (map(o (s) ys)))  = app(y compase  (cons ( & (9 y)) (map(o fo) ys))  (Als = RHS + hus by induction the		
LHS=RHS thus by induction the		
LHS=RHS thus by induction the		(cons ((10 (4) 4) (mp(0 (5) ys))
LHS=RHS thus by induction the		= apply lompeter
		[ (6ns ( \$ 69 x)) (mg) (0 +3) (2)
Statement is proven	<del></del>	
	<del></del>	Statement is proven