2016 Reasoning 1a

let P (is) a rev (flip is) – Flip (rev is)

inductive principle: [P[[]) ^ Hoc: Int. Hocs : [tut] (P(xs) – P(x:xs)]]

- Docs : [Int]. P (KS).

Base case:

to show :P (23) holds

PC(I) = rev (flip II) = flip (rev 11] by def.

rev ([]) = Flip ([]).

[] = []

by def.

True

shown.

Inductive case Inductive hypothesis: P(xs) assume to show: O P(x:xs).

rep (flip x: 8 Jun fin the test = ref (FN ++ Flip xs) = liey (flip itt trev C-K] = flip Krev XsX + rev [-x]

by hyp. rev (flip wixs ) = rev (flip [x] ++ flip xs).

rev (flip 4s) it rev (flip (x3) = flip (rev ks) tt flip (rev [\*]) by hyp.

Hip (revxs ft rev IxI) = Hip (rev xits)