1. We could write out the tree as:

(x+((x+(((x+(cos(x-x)-(x-x)))\*x)\*x))\*x))

Which simplifies to:

(x+((x+(((x+1)\*x)\*x))\*x))

=x+(x^3+x^2+x)\*x

=x^4+x^3+x^2+x

Yes there are unnecessary terms. For example, the cos(x-x)–(x-x) term could be simplified into cos(x-x) directly, since x-x=0.