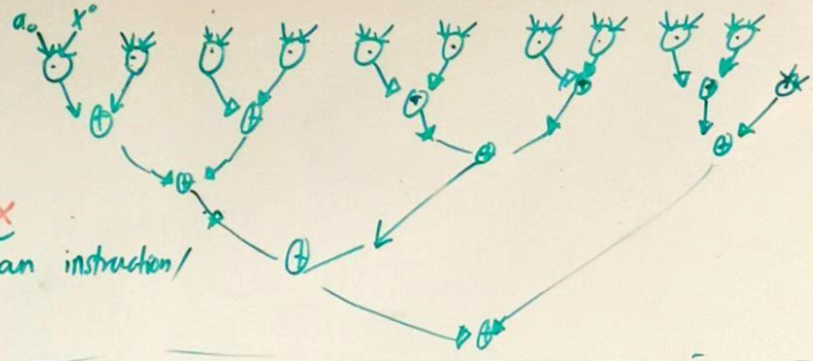
Ex. 2

$f(x) = \sum_{i=0}^{10} a_i(x^i)$

a) Draw the binary tree model



wrong

$x^2 = x \cdot x$

... also an instruction/ work

b) 10 Ramonis big tree has a width of 10 therefor 10 processors is the most efficient.

Ex. 3

a) Maximum speedup can be achieved with two processors

$T_s(n) = 12 = 1+10+1$ $\quad S_p(n) = \frac{12}{7} = 1.71$

$W = 10$

$T_p(n) = 1 + \frac{10}{2} + 1 = 7$

b) 10 processor $1 + \frac{10}{10} + 1 = 3$, $S_p(n) = \frac{12}{3} = 4$

c) -11-

d) Serial 5 instances: $5 \cdot 12 = 60$; Max speedup : $S_p(n) = \frac{60}{35} = 1.71$

Parall -11- : $5 \cdot 7 = 35$

e) $7 \cdot 100 = 700$
$12 \cdot 100 = 1200$ $\quad \frac{1200}{700} = 1.71$