520   (time merge) We want to repeatedly read an input on either channel c or channel d ,
whichever comes first, and write it on channel e . At each reading, if input is available
on both channels, read either one; if it is available on just one channel, read that one; if
it is available on neither channel, wait for the first one and read that one (in case of a tie,
read either one).

(a)√   Write the specification formally, and then write a program.
§   see book Subsection 9.1.4

(b)   Prove
$$\mathcal{T}e_{we} \;=\; t{\uparrow}((\mathcal{T}c_{rc}){\downarrow}(\mathcal{T}d_{rd}) + 1)$$
$$\forall m, n \cdot \mathcal{T}e_{we+m+n+1} \leq (\mathcal{T}c_{rc+m}){\uparrow}(\mathcal{T}d_{rd+n}){\uparrow}(\mathcal{T}e_{we+m+n}) + 1$$
no solution given