

A stack frame

A is running
A calls B.

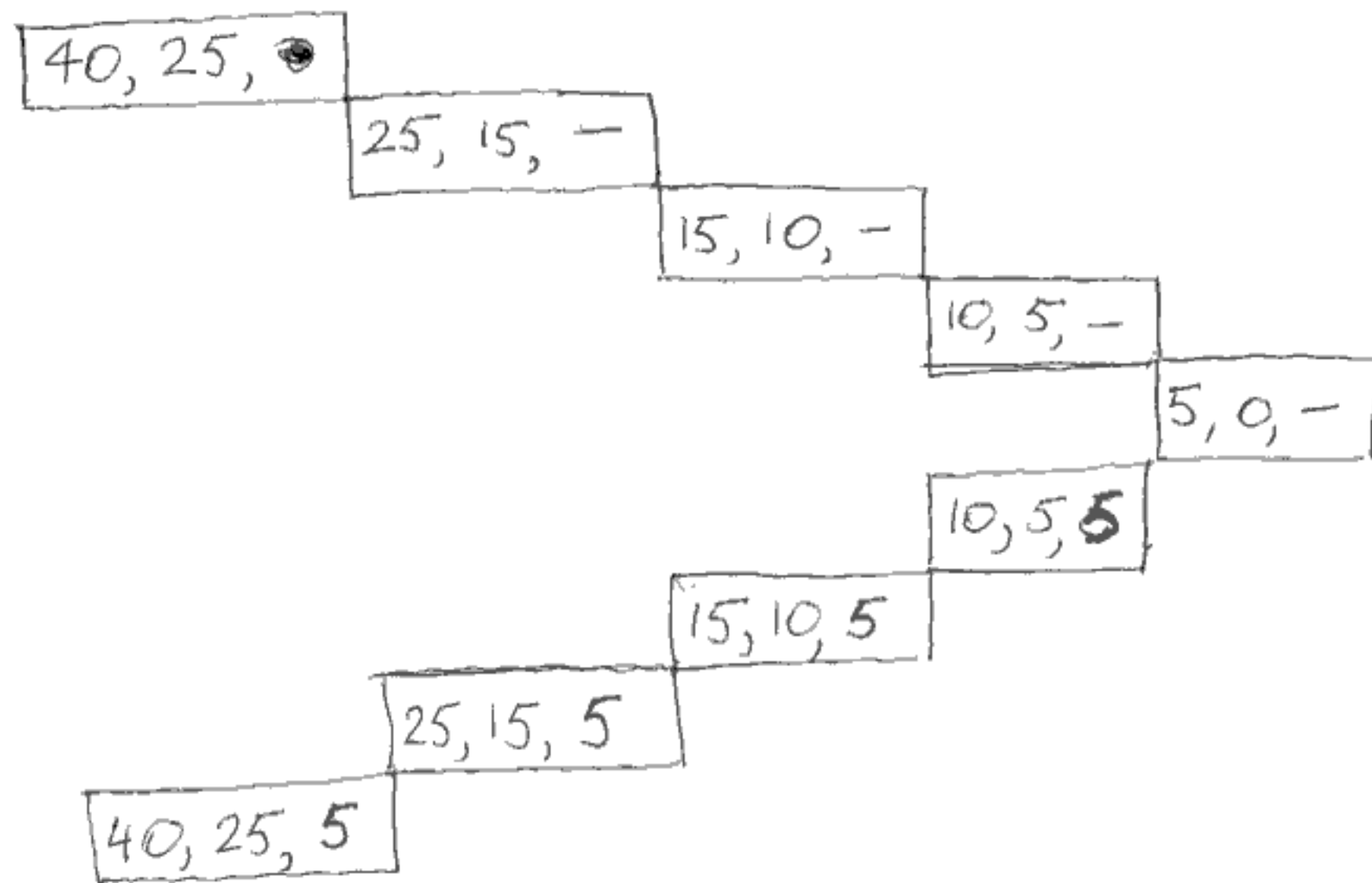
A frame	B frame
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B runs

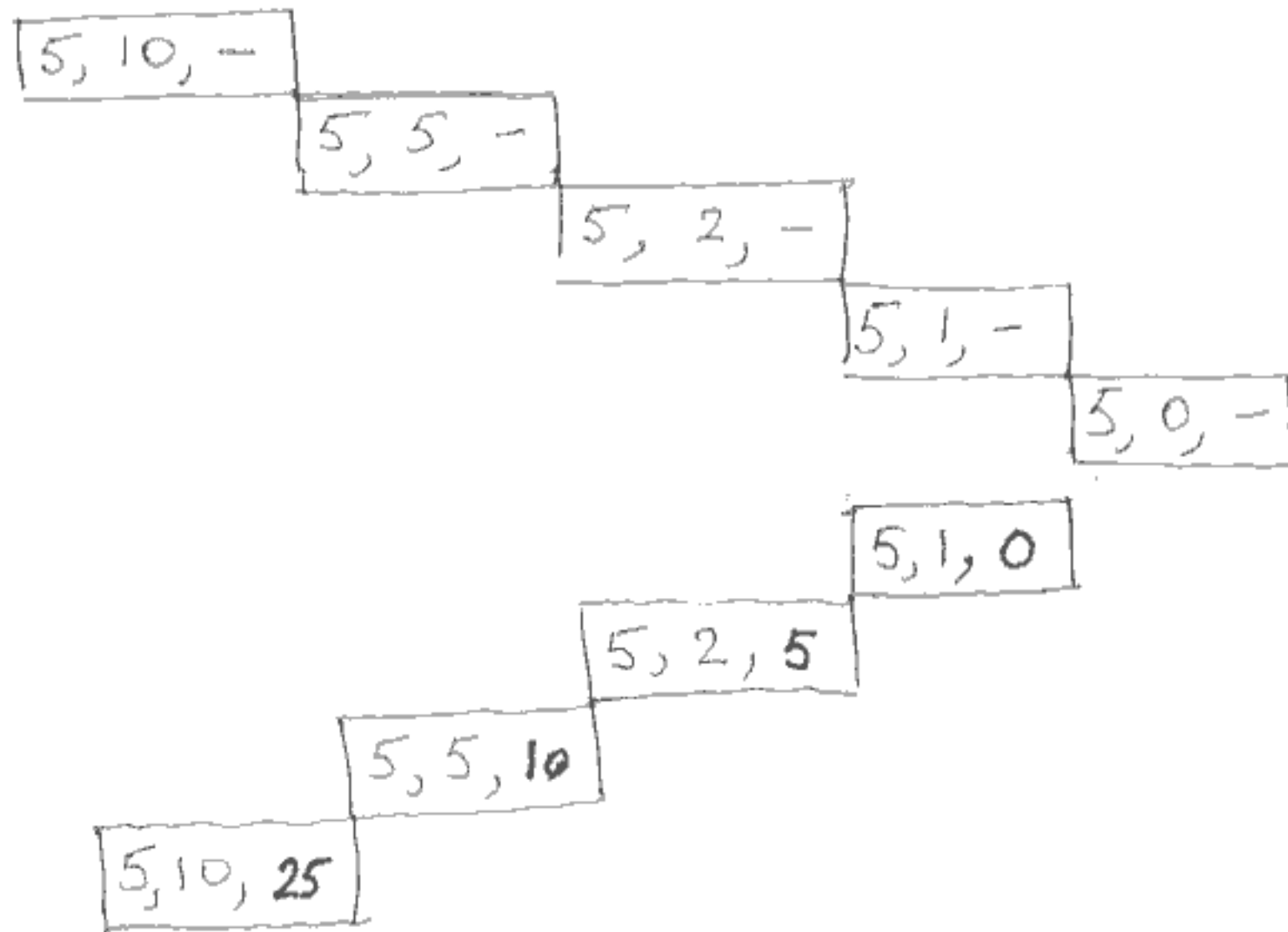
~~A~~ B ends.

A resumes.

A frame



$\gcd(40, 25)$
 $\gcd(25, 15)$
 $\gcd(15, 10)$
 $\gcd(10, 5)$
 $\gcd(5, 0) R5$
 $\gcd(10, 5) R5$
 $\gcd(15, 10) R5$
 $\gcd(25, 15) R5$
 $\gcd(40, 25) R5$



$\text{prod}(5, 10)$

$\text{prod}(5, 5)$

$\text{prod}(5, 2)$

$\text{prod}(5, 1)$

$\text{prod}(5, 0)$ R0

----- R5 (n odd)

----- R $5+5=10$ (even)

----- R $10+10+5$ (odd)

----- R $25+25$ (even)

returns 50.