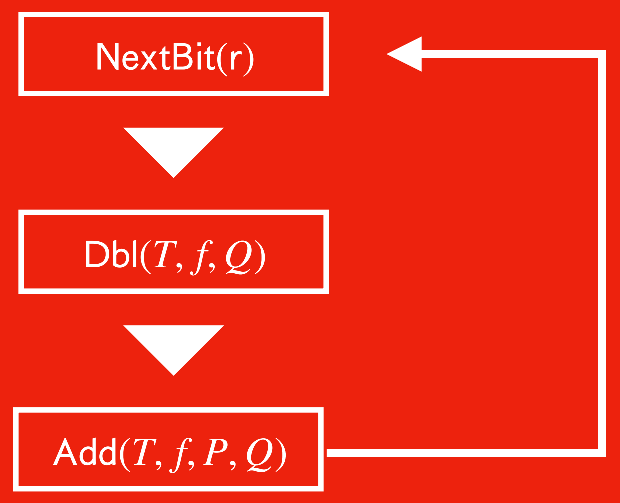
2



Speeding-up general pairings

! **general notice**

Computing pairings fast is quite technical.
Better suited for papers than slides

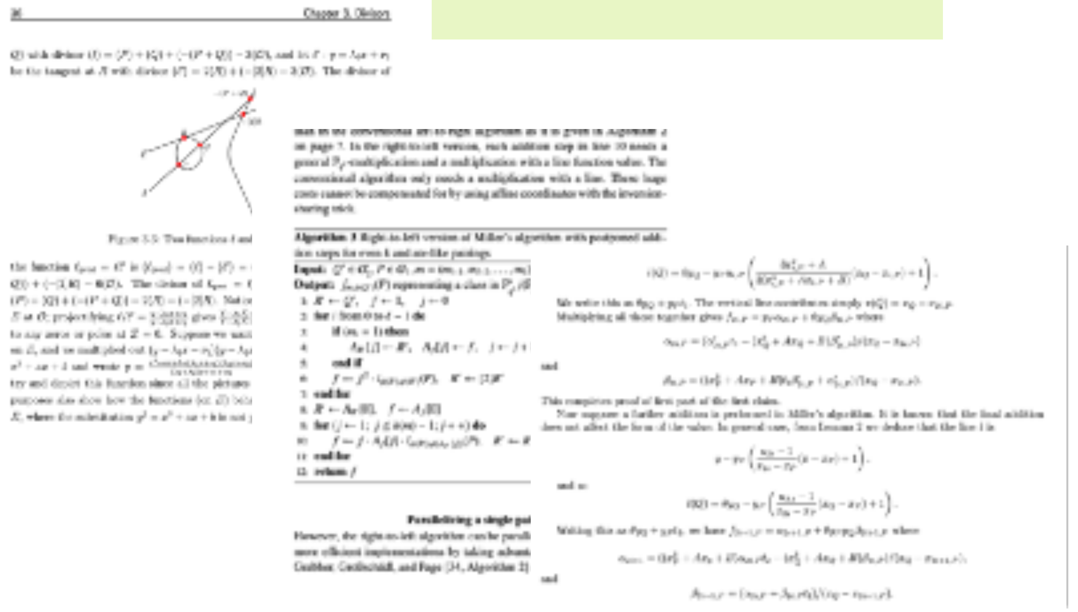
✓ **core idea**

For $P \in E(\mathbb{F}_p)$ and $Q \in E'(\mathbb{F}_p)$,
don't use curve arithmetic
but pairing $e(P, Q)$ to get
overlap in orders!

✓ **general approach**

Instead I describe the general approach,
and leave all details out

0 take some literature



1 implement all tricks that apply

2 benchmark speed and finetune

3 fast pairings

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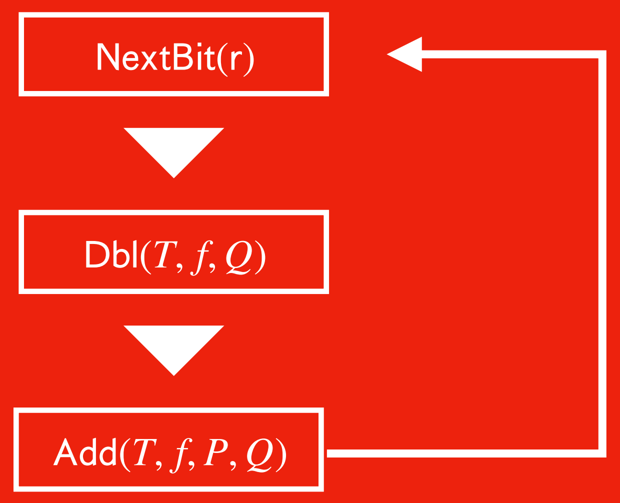
2



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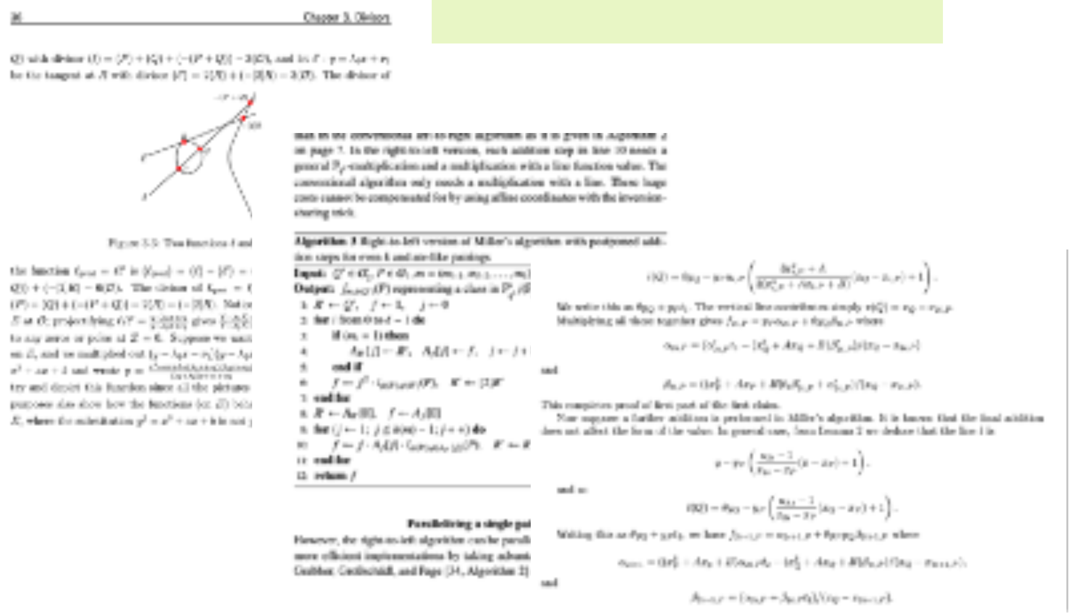

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