Reading: Odomirok.14-F (Schedule F - 2016.Spring Q14) a-Question
Model: 2017.Spring #14
Problem Type: Schedule F provision for reinsurance

Given An insurer has only 2 reinsurers with data as follows:

	recoverables NOT in dispute	unauthorized reinsurer A	authorized reinsurer B
T^n ==>	total reinsurance recoverable	450,000	690,000
P^n ==>	recoverable on paid loss & LAE	400,000	650,000
P^n_{90} ==>	recoverable on paid loss & LAE > 90 days past due	300,000	145,000
	recoverable on paid loss & LAE > 120 days past due		

	recoverables in dispute	unauthorized reinsurer A	authorized reinsurer B
T^d ==>	total reinsurance recoverable	250,000	60,000
	recoverable on paid loss & LAE		
P^d_{90} ==>	recoverable on paid loss & LAE > 90 days past due	0	50,000
	recoverable on paid loss & LAE > 120 days past due		

	other junk you need for the calculation	unauthorized reinsurer A	authorized reinsurer B
part of P^n ==>	amount received prior 90 days	10,000	40,000
part of C ==>	letters of credit (LOC)	250,000	500,000
part of C ==>	ceded balances payable	150,000	30,000
part of C ==>	other amounts due reinsurers	5,000	0

Notation

RP **Reinsurance Provision** <== this is what we want to calculate

T Total Recoverable *(includes amounts NOT IN dispute & amounts IN dispute)*

P Paid Recoverable

C Collateral *(or Offsets to RP)*

A superscript of ^{n} means the amount is NOT in disupte

A superscript of ^{d} means the amount IS in disupte

A subscript of $_{90}$ means the amount is PAST 90 DAYS due

C_s Collateral that is **secured**

C_u Collateral that is **unsecured**

(Schedule F - 2016.Spring Q14) b-Answer

RP	=	RP(A)	+	RP(B)
RP	=	405,000	+	44,000

RP = 449,000 *<== this is the final provision for reinsurance*

unauthorized reinsurer A

RP(A) = T - C
+ min(C , 20% x P^{n}_{90})
+ min(C , 20% x T^{d})

= 700,000 - 405,000
+ min(405,000 , 20% x 300,000)
+ min(405,000 , 20% x 250,000)

= 405,000 *<== REMEMBER: This is **capped** by T =* 700,000

authorized reinsurer B *(that's overdue)*

The provision for authorized but overdue reinsurers depends on whether or not they are **slow-paying**.

slow-paying ratio = P^{n}_{90} / P''
= 145,000 / 650,000
= 22.3%

slow-paying threshold is 20% so this reinsurer is IS slow-paying ==> RP(B) = 44,000

if reinsurer IS NOT slow-paying:

RP(B) = 20% x (P^{n}_{90} + P^{d}_{90})
= 20% x (145,000 + 50,000)
= 39,000 *<== REMEMBER: This is **capped** by T =* 750,000

if reinsurer IS slow-paying:

RP(B) = 20%
x max(T - C , P^{n}_{90} + P^{d}_{90})

= 20%
x max(750,000 - 530,000 , 145,000 + 50,000)

= 44,000 *<== REMEMBER: This is **capped** by T =* 750,000