Reading: Odomirok - Chapter 15   (Schedule P (Model - 2016.Spring Q12))   01a-Question
Model: 2016.Spring #12
Problem Type: Schedule P

Given

Part 2x

Incurred Net Loss & DCC @ Year-End			
AY	**CY-2**	**CY-1**	**CY**
prior	39,790	37,900	32,730
AY-1		34,000	31,620
AY			36,790

In the exam problem, AY = CY = 2013.

Part 3x

Cumulative Paid Net Loss & DCC & Year-End			
AY	**CY-2**	**CY-1**	**CY**
prior	0	19,670	24,720
AY-1		16,680	25,830
AY			18,660

Part 4x

Bulk & IBNR Reserves @ Year-End			
AY	**CY-2**	**CY-1**	**CY**
prior	11,060	5,730	2,350
AY-1		5,670	960
AY			3,650

Calendar Year CY+1 Information

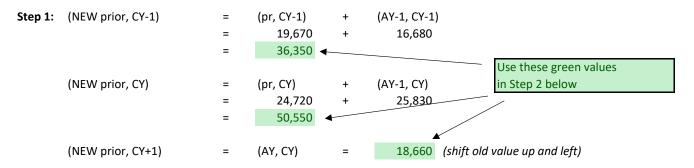|	**CY+1**	**IBNR**	**Case**
AY	**Paid**	**Dec CY+1**	**Dec CY+1**
NEW prior	3,210	2,930	5,430
AY	11,700	1,830	5,560
AY+1	23,550	6,720	16,200

Problem   Update Part 2 & 3 for CY 2014.

Hint   Do Part 3 first, and use this important fact:

    --> *The amounts in the prior year row in Part 3 are **defined** to be the amounts paid **since the end of the year** in the first column.*

That means the top left corner of the Part 3 triangle, prior @ 2012, will be 0.
(The prior year and AY 2012 amounts from the CY 2012 column need to be backed out.)
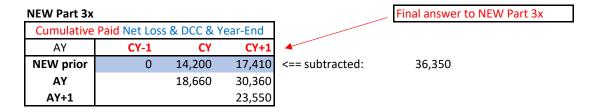
Per the hint, I'm going to start with **PART 3**.　　　　　(Schedule P (Model - 2016.Spring Q12))　01b-Answer

(I'll sometimes use "pr" as short for "prior" below)

Step 1:　(NEW prior, CY-1)　　　　=　　　(pr, CY-1)　　+　　(AY-1, CY-1)

		=	19,670	+	16,680
		=	36,350		

(NEW prior, CY)　　　　=　　　(pr, CY)　　+　　(AY-1, CY)

		=	24,720	+	25,830
		=	50,550		

Use these green values in Step 2 below

(NEW prior, CY+1)　　　=　　(AY, CY)　　=　　　18,660　*(shift old value up and left)*

Step 2:　Calculcate the CY+1 column as shown. *(This is where we use the NEW calendar year information)*

intermediate step					orange CY+1 column:		
AY	**CY-1**	**CY**	**CY+1**		CY col		NEW CY+1 Pd
NEW prior	36,350	50,550	53,760	=	50,550	+	3,210
AY		18,660	30,360	=	18,660	+	11,700
AY+1			23,550	=	0	+	23,550

Step 3:　Back out (NEW prior, CY-1) from the **entire** 1st row

NEW Part 3x　　　　　　　　　　　　　　　Final answer to NEW Part 3x

Cumulative Paid Net Loss & DCC & Year-End			
AY	**CY-1**	**CY**	**CY+1**
NEW prior	0	14,200	17,410
AY		18,660	30,360
AY+1			23,550

<== subtracted:　　　36,350

To get the **NEW Part 2**, we first need the UNPAID triangle *(which isn't part of Schedule P)* The **original** unpaid triangle equals **(part 2) - (part 3)**.

Year-End: CY

Unpaid = (part 2) - (part 3)			
AY	**CY-2**	**CY-1**	**CY**
prior	39,790	18,230	8,010
AY-1		17,320	5,790
AY			18,130

Next, we need the **updated** unpaid triangle. Apply Step 1 to the triangle above to get the green highlighted values. Then use the new calendar year **IBNR & Case** to get the orange column.

UPDATED unpaid triangle					orange CY+1 column:		
AY	**CY-1**	**CY**	**CY+1**		IBNR		Case
NEW prior	35,550	13,800	8,360	=	2,930	+	5,430
AY		18,130	7,390	=	1,830	+	5,560
AY+1			22,920	=	6,720	+	16,200

The **NEW Part 2** exhibit equals: (unpaid triangle above) + (final part 3x triangle from Step 3) = (unpaid) + (paid)

NEW Part 2x　　　　　　　　　　　　　　　Final answer to NEW Part 2x

Incurred Net Loss & DCC @ Year-End			
AY	**CY-2**	**CY-1**	**CY**
prior	35,550	28,000	25,770
AY-1		36,790	37,750
AY			46,470