Find   Calculate the experience modification factor for a CL policy given the following Policy Year (PY) data.

Given

Reported Losses and ALAE at 3/31/10 Limited by Basic Limits and MSL	231,000	= RL
Expected Unreported Losses and ALAE at 3/31/10 Limited by Basic Limits and MSL	?	= URL
== > Projected Ultimate Losses and ALAE Limited by Basic Limits and MSL	?	= Ult
Company Subject Basic Limit Loss and ALAE Costs	?	= C
Actual Experience Ratio	?	= AER
Expected Experience Ratio	0.840	= EER
Credibility	0.480	= Z
==> Experience (Credit)/Debit	?	= CD

Expected Unrptd Subject Loss Costs	(3) current company B/L loss	(4) detrend factors	(7) Mar 31 2023 expected B/L loss % unrptd
PY 20 ending July 1	92,400	0.790	0.100
PY 21 ending July 1	97,000	0.860	0.190
PY 22 ending July 1	107,700	0.910	0.260

* B/L Loss is Basic Limits Loss

* The company subject basic limit loss and ALAE costs represents the expected loss and ALAE underlying
the current rating manual rates adjusted to the dollar level of the experience period.

Step 1   calculate C, URL, and Ult by completing this table

Expected Unrptd Subject Loss Costs	(3) current company B/L loss	(4) detrend factors	(3) x (4) detrd'd current company B/L loss	(6) EER	(7) Mar 31 2023 expected B/L loss % unrptd	(5)x(6)x(7) expected B/L loss $ unrptd
PY 20 ending July 1	92,400	0.790	72,996	0.840	0.100	6,132
PY 21 ending July 1	97,000	0.860	83,420	0.840	0.190	13,314
PY 22 ending July 1	107,700	0.910	98,007	0.840	0.260	21,405
		C =	254,423		URL =	40,850

then

$$\begin{aligned} \text{Ult} &= \text{RL} + \text{URL} \\ &= 231,000 + 40,850 \\ &= 271,850 \end{aligned}$$

Step 2   calculate AER

$$\begin{aligned} \text{AER} &= \text{Ult} / \text{C} \\ &= 271,850 / 254,423 \\ &= 1.068 \end{aligned}$$

Step 3   calculate the final experience credit/debit CD

$$\begin{aligned} \text{CD} &= (\text{AER} - \text{EER}) / \text{EER} \times \text{Z} \\ &= (1.068 - 0.840) / 0.840 \times 0.480 \\ &= 13.06\% \quad \Longleftarrow \textit{final answer} \end{aligned}$$

Find   Calculate the experience modification factor for a CL policy given the following Policy Year (PY) data.

Given

Reported Losses and ALAE at 3/31/10 Limited by Basic Limits and MSL	292,000	= RL
Expected Unreported Losses and ALAE at 3/31/10 Limited by Basic Limits and MSL	?	= URL
== > Projected Ultimate Losses and ALAE Limited by Basic Limits and MSL	?	= Ult
Company Subject Basic Limit Loss and ALAE Costs	?	= C
Actual Experience Ratio	?	= AER
Expected Experience Ratio	0.860	= EER
Credibility	0.430	= Z
==> Experience (Credit)/Debit	?	= CD

	(3)	(4)	(7)
Expected Unrptd Subject Loss Costs	current company B/L loss	detrend factors	Mar 31 2023 expected B/L loss % unrptd
PY 20 ending July 1	96,400	0.800	0.090
PY 21 ending July 1	102,200	0.850	0.160
PY 22 ending July 1	116,500	0.940	0.280

* B/L Loss is Basic Limits Loss

* The company subject basic limit loss and ALAE costs represents the expected loss and ALAE underlying the current rating manual rates adjusted to the dollar level of the experience period.

Step 1 calculate C, URL, and Ult by completing this table

Expected Unrptd Subject Loss Costs	(3) current company B/L loss	(4) detrend factors	(3) x (4) detrd'd current company B/L loss	(6) EER	(7) Mar 31 2023 expected B/L loss % unrptd	(5)x(6)x(7) expected B/L loss $ unrptd
PY 20 ending July 1	96,400	0.800	77,120	0.860	0.090	5,969
PY 21 ending July 1	102,200	0.850	86,870	0.860	0.160	11,953
PY 22 ending July 1	116,500	0.940	109,510	0.860	0.280	26,370
			C = 273,500		URL =	44,292

then

Ult	=	RL	+	URL
	=	292,000	+	44,292
	=	**336,292**		

Step 2 calculate AER

AER	=	Ult	/	C
	=	**336,292**	/	273,500
	=	1.230		

Step 3 calculate the final experience credit/debit CD

CD	=	(	AER	-	EER	)	/	EER	x	Z
	=	(	1.230	-	0.860	)	/	0.860	x	0.430
	=	18.48%	<==== *final answer*							