Given (classical) 19S.23

Use the classical approach to estimate the unpaid ALAE for AY 2017

occurrence <== policy type

CY	paid ULAE	paid claims	incurred claims
2013	0	0	0
2014	25,000	62,500	250,000
2015	50,000	250,000	500,000
2016	75,000	500,000	750,000
2017	90,000	600,000	900,000

<== incurred includes reported & IBNR

150,000	case outstanding
100,000	total IBNR
60%	% of total IBNR attributed to future case development on known claims

Step 1: classical ULAE ratio ==> (paid ULAE) / (paid claims)

CY	paid ULAE	paid claims	ULAE ratio
2013	0	0	
2014	25,000	62,500	40.0%
2015	50,000	250,000	20.0%
2016	75,000	500,000	15.0%
2017	90,000	600,000	15.0%
			15.0%

<== selected (judgement)

Sometimes there is a trend in ULAE ratios.
If so, you may need to use judgement
instead of just selecting the average

Step 2: apply formula for unpaid ULAE

unpaid ULAE = (ULAE ratio) x [50% x (Case + IBNER) + 100% x IBNYR]

where:

IBNER = 60% x Total IBNR <== Incurred But Not ENOUGH Reported
= 60% x 100,000
= 60,000

IBNYR = Tot IBNR - IBNER <== Incurred But Not YET Reported
= 100,000 - 60,000
= 40,000

therefore:

unpaid ULAE = 15% x [50% x 210,000 + 100% x 40,000]

unpaid ULAE = 21,750 <== final answer

Given (Kittel) 19S.23

Use the **Kittel** approach to estimate the **unpaid** ALAE for AY **2017**

occurrence <== policy type

CY	paid ULAE	paid claims	incurred claims
2013	0	0	0
2014	25,000	62,500	250,000
2015	50,000	250,000	500,000
2016	75,000	500,000	750,000
2017	90,000	600,000	900,000

<== incurred includes reported & IBNR

150,000	case outstanding
100,000	total IBNR
60%	% of total IBNR attributed to future case development on known claims

Step 1: Kittel ULAE ratio ==> (paid ULAE) / AVG [(paid claims) , (incurred claims)]

CY	paid ULAE	average (pd, inc)	ULAE ratio
2013	0	0	
2014	25,000	156,250	16.0%
2015	50,000	375,000	13.3%
2016	75,000	625,000	12.0%
2017	90,000	750,000	12.0%
			12.0%

<== selected (judgement)

Sometimes there is a trend in ULAE ratios.
If so, you may need to use judgement
instead of just selecting the average

Step 2: apply formula for unpaid ULAE

unpaid ULAE = (ULAE ratio) x [50% x (Case + IBNER) + 100% x IBNYR]

where:

IBNER	=	60%	x	Total IBNR	<== Incurred But Not ENOUGH Reported
	=	60%	x	100,000	
	=	60,000			
IBNYR	=	Tot IBNR	-	IBNER	<== Incurred But Not YET Reported
	=	100,000	-	60,000	
	=	40,000			

therefore:

unpaid ULAE = 12% x [50% x 210,000 + 100% x 40,000]

unpaid ULAE = 17,400 <== final answer