

**Basic Reserving, Q. 16.12:**

Accident Year	Calendar Year 2024 Paid Claims Only (\$000)
2021	400
2022	1800
2023	1900
2024	3000

**Basic Reserving, Solution 17.2:**

Year	CY Paid ULAE	CY Paid Claims	AY IBNR	AY Reported Claims	AY Ultimate Claims	Claims Basis	ULAE Ratio
2021	\$6,500	\$41,000	\$7,000	\$101,300	\$108,300	\$81,380	<b>7.99%</b>
2022	\$9,200	\$58,300	\$18,100	\$138,400	\$156,500	\$117,220	<b>7.85%</b>
2023	\$11,000	\$86,000	\$32,200	\$126,900	\$159,100	\$129,860	<b>8.47%</b>
2024	\$12,400	\$105,500	\$56,300	\$127,000	\$183,300	\$152,180	<b>8.15%</b>
Total	\$39,100	\$290,800	\$113,600	\$493,600	\$607,200	\$480,640	<b>8.13%</b>

Based on the overall ratio, I am selecting a ULAE Ratio of 8.1%.

Estimate the pure IBNR as 5% of latest AY Ultimate:  $(5\%)(183,300) = 9165$ .

Estimated unpaid ULAE:

$(8.1\%) \{ (60\%)(9165) + (40\%)(607,200 - 290,800) \} = \mathbf{\$10,697}$ .

**Basic Reserving, Q. 17.15:**

Calendar Year	Earned Premium (\$000)	Paid ULAE (\$000)
2021	3400	<b>40</b>
2022	5500	<b>130</b>
2023	5800	<b>200</b>
2024	6200	<b>230</b>