

G. Additional Results on LLaVA-13B

GA/Forget Quality	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.485	0.07	0.035	0.015
Task B		0.057	0.022	0.011
Task C			0.1	0.08
Task D				0.03

Table 22. GA’s results of forget quality.

GA/Model Utility	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.384	0.01	0	0
Task B		0.25	0.15	0.125
Task C			0.1	0.08
Task D				0.2

Table 23. GA’s results of model utility.

KL/Forget Quality	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.47	0.145	0.02	0.04
Task B		0.113	0.03	0.028
Task C			0.105	0.095
Task D				0.065

Table 24. KL’s results of forget quality.

KL/Model Utility	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.538	0.03	0	0
Task B		0.325	0.116	0.125
Task C			0.04	0.038
Task D				0.115

Table 25. KL’s results of model utility.

GD/Forget Quality	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.34	0.005	0.005	0
Task B		0.005	0.01	0.005
Task C			0.025	0.01
Task D				0.02

Table 26. GD’s results of forget quality.

GD/Model Utility	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.06	0	0	0
Task B		0.25	0.175	0.125
Task C			0.06	0.07
Task D				0.04

Table 27. GD’s results of model utility.

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NPO/Forget Quality	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.51	0.03	0	0
Task B		0.05	0	0
Task C			0	0
Task D				0

Table 28. NPO’s results of forget quality.

NPO/Model Utility	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.084	0	0	0
Task B		0	0	0
Task C			0	0
Task D				0

Table 29. NPO’s results of model utility.

LUMoE/Forget Quality	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	1	1	1	1
Task B		0.95	0.95	0.95
Task C			1	1
Task D				0.98

Table 30. LUMoE’s results of forget quality.

LUMoE/Model Utility	Unlearn A	Unlearn B	Unlearn C	Unlearn D
Task A	0.95	0.95	0.95	0.95
Task B		0.90	0.90	0.90
Task C			0.92	0.92
Task D				0.94

Table 31. LUMoE’s results of model utility.