

Table 14. RE

Methods	RE21	RE22	RE23	RE24	RE25	RE31	RE32	RE33	RE34	RE35	RE36	RE37	RE41	RE42	RE61
$\mathcal{D}(\text{best})$	4.42	4.78	4.75 ± 0.00	4.59	4.79	10.23 ± 0.00	10.53	10.59	48.06	10.96	7.57	4.72	36.17	12.28	135.87
End-to-End	4.59 ± 0.17	/	4.84 ± 0.00	/	/	0.00 ± 0.00	/	10.69 ± 0.00	52.86 ± 0.05	/	/	6.26 ± 0.05	53.20 ± 0.00	20.51 ± 0.48	143.49 ± 0.79
End-to-End + GradNorm	4.81 ± 0.01	/	2.64 ± 0.00	/	/	10.65 ± 0.00	/	9.90 ± 0.00	51.98 ± 0.63	/	/	6.11 ± 0.10	47.44 ± 0.00	13.46 ± 0.00	140.92 ± 0.43
End-to-End + PcGrad	4.90 ± 0.05	/	<u>4.84 ± 0.00</u>	/	/	<u>10.65 ± 0.00</u>	/	10.41 ± 0.07	52.78 ± 0.04	/	/	5.52 ± 0.00	50.15 ± 0.00	14.28 ± 0.11	140.96 ± 1.64
Multi-Head	4.42 ± 0.00	/	4.84 ± 0.00	/	/	10.65 ± 0.00	/	10.68 ± 0.01	52.79 ± 0.01	/	/	5.83 ± 0.00	/	20.99 ± 0.01	140.39 ± 0.25
Multi-Head + GradNorm	4.91 ± 0.00	/	4.82 ± 0.00	/	/	10.63 ± 0.00	/	5.83 ± 0.02	52.79 ± 0.07	/	/	6.30 ± 0.05	51.52 ± 0.00	16.22 ± 2.75	141.79 ± 2.22
Multi-Head + PcGrad	4.91 ± 0.01	/	2.64 ± 0.00	/	/	0.00 ± 0.00	/	10.59 ± 0.02	52.81 ± 0.12	/	/	6.39 ± 0.02	50.74 ± 0.00	20.00 ± 0.06	141.24 ± 1.36
Multiple Models	4.94 ± 0.00	/	4.84 ± 0.00	/	/	10.65 ± 0.00	/	<u>10.69 ± 0.00</u>	<u>54.15 ± 0.00</u>	/	/	6.49 ± 0.00	<u>53.13 ± 0.00</u>	<u>20.89 ± 0.07</u>	144.20 ± 0.02
Multiple Models + COMs	4.20 ± 0.38	/	4.81 ± 0.01	/	/	/	/	10.56 ± 0.02	52.17 ± 0.33	/	/	5.99 ± 0.03	47.16 ± 0.00	15.12 ± 0.32	141.00 ± 0.81
Multiple Models + RoMA	4.92 ± 0.00	/	4.84 ± 0.00	/	/	/	/	10.46 ± 0.11	52.78 ± 0.02	/	/	6.49 ± 0.01	49.91 ± 0.00	19.53 ± 0.21	143.61 ± 0.20
Multiple Models + IOM	<u>4.94 ± 0.00</u>	/	4.84 ± 0.00	/	/	/	/	10.68 ± 0.00	54.16 ± 0.00	/	/	<u>6.54 ± 0.00</u>	/	20.78 ± 0.02	143.30 ± 0.14
Multiple Models + ICT	4.75 ± 0.17	/	4.84 ± 0.00	/	/	10.63 ± 0.00	/	10.18 ± 0.03	51.53 ± 0.73	/	/	6.25 ± 0.07	50.33 ± 0.00	20.59 ± 0.20	143.11 ± 0.23
Multiple Models + Tri-Mentoring	4.91 ± 0.00	/	2.67 ± 0.00	/	/	10.64 ± 0.00	/	9.99 ± 0.00	52.76 ± 0.58	/	/	6.38 ± 0.06	50.51 ± 0.00	20.30 ± 0.11	<u>143.82 ± 0.07</u>
MOBO	4.66 ± 0.06	/	4.84 ± 0.00	/	/	/	/	10.69 ± 0.00	52.05 ± 0.00	/	/	6.60 ± 0.00	/	16.03 ± 0.43	N/A
MOBO-ParEGO	4.65 ± 0.04	<u>4.61 ± 0.00</u>	4.84 ± 0.00	<u>3.74 ± 0.00</u>	<u>4.71 ± 0.00</u>	10.64 ± 0.01	<u>9.77 ± 0.02</u>	10.61 ± 0.03	49.27 ± 1.14	<u>0.00 ± 0.00</u>	<u>0.00 ± 0.00</u>	5.87 ± 0.05	N/A	N/A	N/A
MOBO-JES	4.85 ± 0.03	4.61 ± 0.00	4.83 ± 0.00	3.74 ± 0.00	4.60 ± 0.00	/	/	/	/	/	/	/	N/A	N/A	N/A