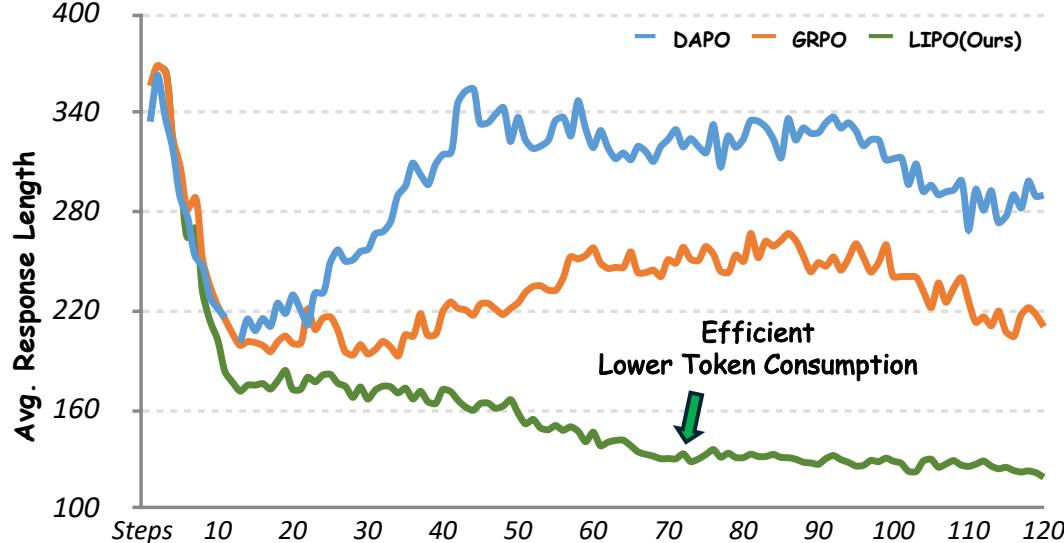
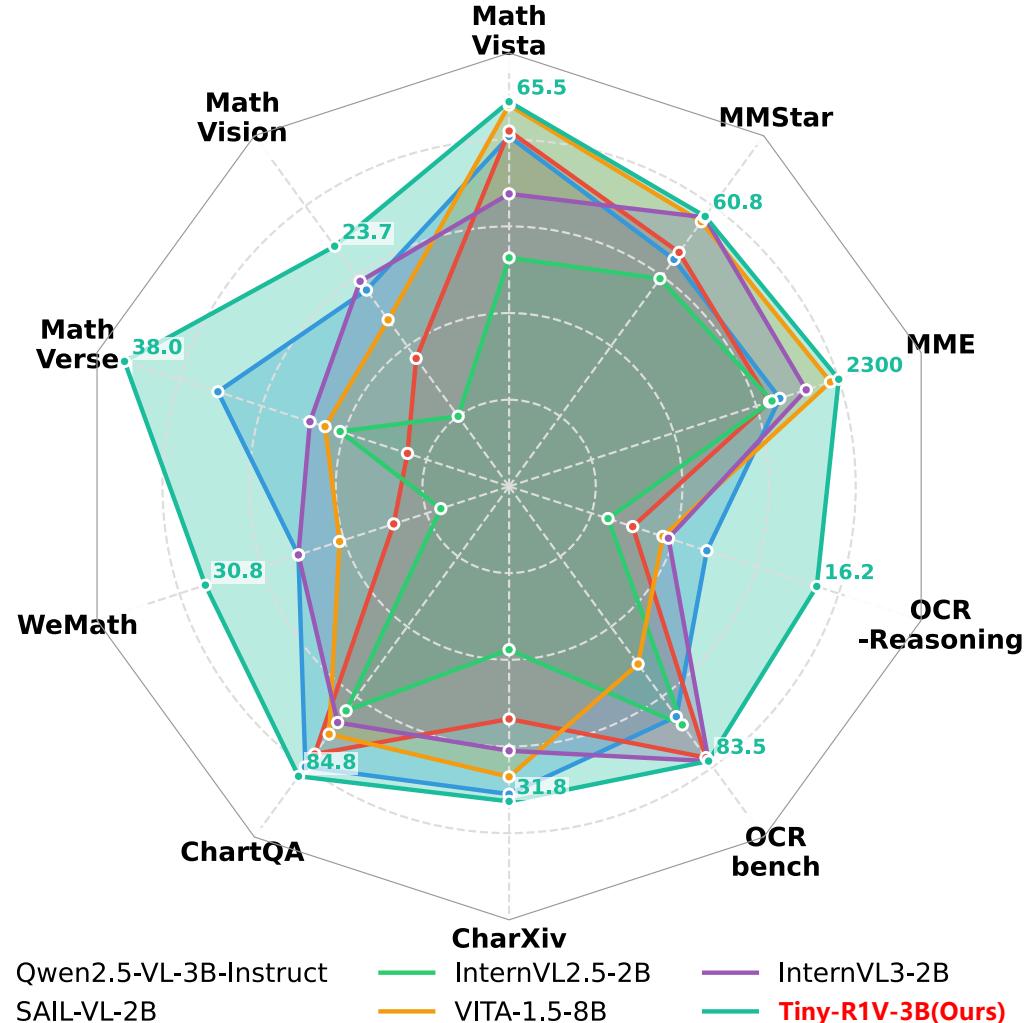


(a) Tiny-R1V: Unified Reasoning MLLM via LIPO and AMM



(b) Evolution of mean response length across methods during training process



(c) Comparison with other reasoning MLLMs.