### Instruction Generation Template

The Prompt templates used by the large language model for generating instructions on the three datasets are shown in Table III.

**Table III** Instruction Generation Template

|  |  |
| --- | --- |
|  | Prompt |
| ScienceQA | Based on the following examples of questions, reasoning steps, and answers,  provide a general reasoning process for solving {label} tasks (within 250 words):  {samples} |
| TabMWP | Based on the following examples of table-based multiple-choice questions, reasoning steps, and answers (1, 2, 3, or 4),  provide a general step-by-step reasoning process for solving this task by extracting relevant information from the table (within 200 words):  {samples} |
| DeepMath | Based on the following examples of mathematical questions, reasoning steps, and answers (real numbers),  provide a general step-by-step reasoning process for solving this task (within 250 words).  The process should describe a single, optimal reasoning path without listing alternative methods or optional steps.  Ensure the steps are clear, concise, and lead directly to the correct answer.  {samples} |