

I. 背景

问题 q : Find A that satisfies $32 \times A \times A \times A = 42592$

模版 T : Find A that satisfies <coefficient> $\times A \times A \times A =$ <result>

变量集 x :

```
{ {name: <coefficient>, type: int, value: 32},  
{name: <result>, type: int, value: 42592} }
```

逻辑 L_T 的代码形式:
 $A_cubed = result / coefficient$
 $A = A cubed ** (1 / 3)$

逻辑 L_T 的文本形式:
First, divide both sides by <coefficient>. Then,

思维链 (CoT):

First, divide both sides by 32. Then, take the cube root of 1331.

金标答案 y : The answer is \boxed{11}.

直接推理

$$q \longrightarrow y$$

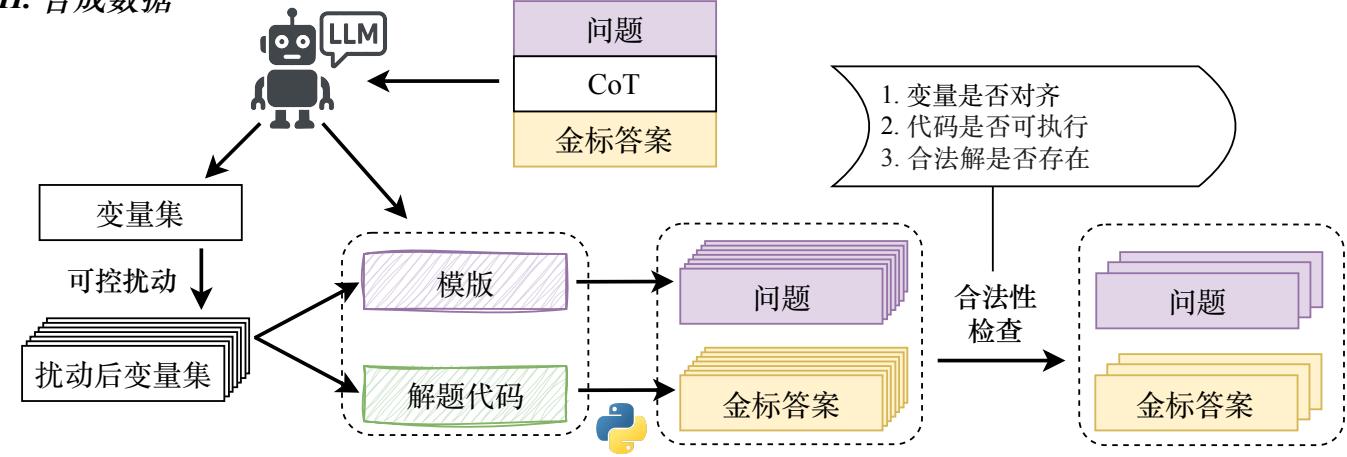
来自虚假推理的CoT

$$q \longrightarrow z \longrightarrow y$$

来自自适应推理的CoT

$$T(x) \longrightarrow L_T(x) \longrightarrow y$$

II. 合成数据



III. 强化学习

