anthropic/claude-sonnet-4-20250514 — accuracy — prompt_c6875730a1 (horn_if_then)

prompt_template=prompts/exp6_horn_yesno.j2 | parse_family=yes_no

Instruction excerpt:

```
Your task is to solve a problem in propositional logic containing both facts
and if-then rules.
You will get a list of facts and if-then rules and have to determine whether a
fact p0 can be derived from this list.
If a fact p0 can be derived, the last word of your answer should be 'yes',
otherwise the last word should be 'no'.

Facts are represented as 'pN' where N is a number.
All the statements are either facts or if-then rules allowing to derive a
single fact.
All the given statements are implicitly connected with 'and': they are all
claimed to be true.

...
```

Example (horn=1, low, maxvars=3, maxlen=3, satflag=1)

```
p1. p2. if p1 then p0. Answer: yes.
Example 2. Statements: p1. p2. if p1 then p9. Answer: no.
Example 3. Statements: p1. if p1 then p2. if p2 then p0. Answer: yes.
Example 4. Statements: p1. if p1 then p3. if p2 and p1 then p0. Answer: no.
Example 5. Statements: p1. if p1 then p2. if p2 then p3. if p3 then p0.
Answer: yes.
Example 6. Statements: p1. if p1 then p2. if p2 then p1. if p3 then p0.
Answer: no.
Example 7. Statements: p1. p3. if p1 then p2. if p2 and p3 then p4. if p4 then
p0. Answer: yes.
Example 8. Statements: p1. if p1 then p2. if p2 and p3 then p4. if p4 then p0.
Answer: no.
Example 9.  Statements: p6. p3. if p3 then p1. if p3 then p1. if p4 and p5
...
```

Full prompt text + more examples: experiments/paper_outputs/prompts/prompt_catalog.md

anthropic/claude-sonnet-4-20250514 — sat_accuracy — prompt_c6875730a1 (horn=1, then)

prompt_template=prompts/exp6_horn_yesno.j2 | parse_family=yes_no

Instruction excerpt:

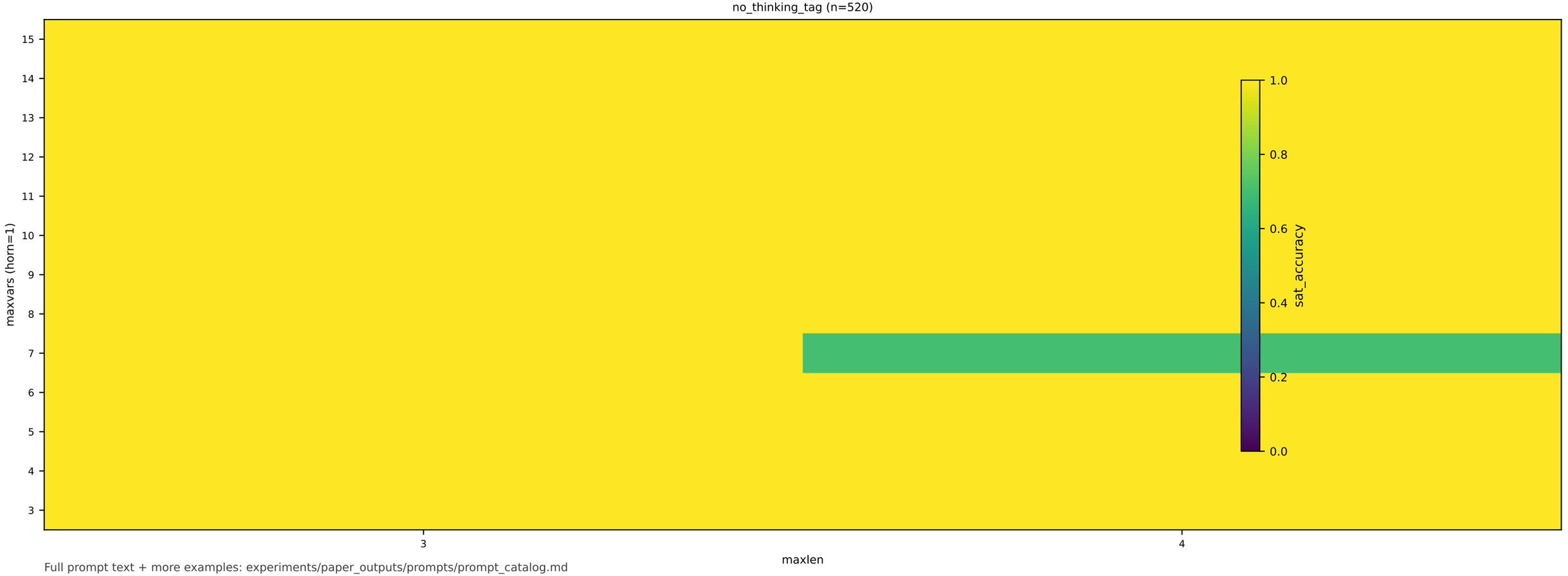
```
Your task is to solve a problem in propositional logic containing both facts
and if-then rules.
You will get a list of facts and if-then rules and have to determine whether a
fact p0 can be derived from this list.
If a fact p0 can be derived, the last word of your answer should be 'yes',
otherwise the last word should be 'no'.

Facts are represented as 'pN' where N is a number.
All the statements are either facts or if-then rules allowing to derive a
single fact.
All the given statements are implicitly connected with 'and': they are all
claimed to be true.

...
```

Example (horn=1, low, maxvars=3, maxlen=3, satflag=1)

```
p1. p2. if p1 then p0. Answer: yes.
Example 2. Statements: p1. p2. if p1 then p9. Answer: no.
Example 3. Statements: p1. if p1 then p2. if p2 then p0. Answer: yes.
Example 4. Statements: p1. if p1 then p3. if p2 and p1 then p0. Answer: no.
Example 5. Statements: p1. if p1 then p2. if p2 then p3. if p3 then p0.
Answer: yes.
Example 6. Statements: p1. if p1 then p2. if p2 then p1. if p3 then p0.
Answer: no.
Example 7. Statements: p1. p3. if p1 then p2. if p2 and p3 then p4. if p4 then
p0. Answer: yes.
Example 8. Statements: p1. if p1 then p2. if p2 and p3 then p4. if p4 then p0.
Answer: no.
Example 9.  Statements: p6. p3. if p3 then p1. if p3 then p1. if p4 and p5
...
```



Full prompt text + more examples: experiments/paper_outputs/prompts/prompt_catalog.md

anthropic/claude-sonnet-4-20250514 — unsat_accuracy — prompt_c6875730a1 (horn=1, if_then)

prompt_template=prompts/exp6_horn_yesno.j2 | parse_family=yes_no

Instruction excerpt:

```
Your task is to solve a problem in propositional logic containing both facts
and if-then rules.
You will get a list of facts and if-then rules and have to determine whether a
fact p0 can be derived from this list.
If a fact p0 can be derived, the last word of your answer should be 'yes',
otherwise the last word should be 'no'.

Facts are represented as 'pN' where N is a number.
All the statements are either facts or if-then rules allowing to derive a
single fact.
All the given statements are implicitly connected with 'and': they are all
claimed to be true.

...
```

Example (horn=1, low, maxvars=3, maxlen=3, satflag=1)

```
p1. p2. If p1 then p0. Answer: yes.
Example 2. Statements: p1. p2. if p1 then p9. Answer: no.
Example 3. Statements: p1. if p1 then p2. if p2 then p0. Answer: yes.
Example 4. Statements: p1. if p1 then p3. if p2 and p1 then p0. Answer: no.
Example 5. Statements: p1. if p1 then p2. if p2 then p3. if p3 then p0.
Answer: yes.
Example 6. Statements: p1. if p1 then p2. if p2 then p1. if p3 then p0.
Answer: no.
Example 7. Statements: p1. p3. if p1 then p2. if p2 and p3 then p4. if p4 then
p0. Answer: yes.
Example 8. Statements: p1. if p1 then p2. if p2 and p3 then p4. if p4 then p0.
Answer: no.
Example 9.  Statements: p6. p3. if p3 then p1. if p3 then p1. if p4 and p5
...
```

Full prompt text + more examples: experiments/paper_outputs/prompts/prompt_catalog.md