



$E(p \cup q)$
F G

```

begin • W := sat(p)
      • X := S
      • Y := sat(q)
      repeat until X=Y:
      begin
        • X := Y
        • Y := Y ∪ (W ∧ me3(Y))
      end
      return Y
end
  
```

- $W := \text{sat}(p) = \{S_2, S_3, S_6, S_7\}$
- $X := S = \{S_0, \dots, S_7\}$
- $Y := \text{sat}(q) = \{S_2, S_4, S_5, S_6\}$

- X ≠ Y**
- $X := \{S_2, S_4, S_5, S_6\}$
 - $Y := Y \cup (W \cap \text{me}_3(Y)) = Y \cup \{S_2, S_3\} = \{S_2, S_3, S_4, S_5, S_6\}$

$\text{me}_3(Y) = \{S_3, S_5, S_2, S_0, S_4\}$

- X ≠ Y**
- $X := \{S_2, S_3, S_4, S_5, S_6\}$
 - $Y := Y \cup (W \cap \text{me}_3(Y)) = \{S_2, S_3, S_4, S_5, S_6, S_7\}$

- X ≠ Y**
- $X := Y$
 - $Y := Y \cup \dots = \text{unchanged}$

$\text{sat}(E(p \cup q)) = \{S_2, S_3, S_4, S_5, S_6, S_7\}$

