

# ComS 472

## Homework 3

Sean Gordon

Oct 12, 2020

- 6.1 -

- 1) 3 colors for (SA), 2 for (WA), 1 for (NT, Q, NSW, V), 3 for (T)  $\Rightarrow$   
 $3 * 2 * 1 * 1 * 1 * 1 * 3 = 18$  solutions
- 2) 4:(SA), 3:(WA), 2:(NT, Q, NSW, V), 4:(T)  $\Rightarrow 4 * 3 * 2 * 2 * 2 * 2 * 4 = 768$  solutions
- 3) 2:(SA), 1:(WA), 0:(NT, Q, NSW, V), 2:(T)  $\Rightarrow 2 * 1 * 0 * 0 * 0 * 0 * 2 = 0$  solutions

---

- 4.7 -

---

- 6.8 -

- 1) A1  $\rightarrow$  R ✓
- 2) H  $\rightarrow$  R **X**, conflicts with A1  $\rightarrow$  backtrack
- 3) H  $\rightarrow$  G ✓
- 4) A4  $\rightarrow$  R ✓
- 5) F1  $\rightarrow$  R ✓
- 6) A2  $\rightarrow$  R ✓
- 7) F2  $\rightarrow$  R ✓
- 8) A3  $\rightarrow$  R ✓
- 9) T  $\rightarrow$  R **X**, conflicts with F1  $\rightarrow$  backtrack
- 9) T  $\rightarrow$  G **X**, conflicts with H  $\rightarrow$  backtrack
- 9) T  $\rightarrow$  B ✓