(a) \( A \Sigma 8, 4 \) 

(b) \( \text{vo} = (\text{A} \Sigma 3) - \text{L}_1 \times \text{M}_1 - \text{L}_2 \times \text{M}_2 \) 

\( \text{M}_2 = 3 \times 4 = 12 \)  
\( \text{M}_1 = 12 \times \text{stride} = 3 \times (20 - x) \)  
\( x = 7 \)  
\( \text{Vo} = 2000 - 3 \times 51 - 4 \times 7 \)  
\( = 2000 - 408 - 12 \)  
\( = 1580 \) 
\( \text{CA}(A, I, 1, 3) = 1580 + 1 \times 51 + 3 \times 3 \)  
\( \text{CA}(A, I, 1, 1) = 1580 + 1 \times 51 + 3 \times 3 \) 

- Synthesizing - "up" the tree: \( \text{val} \) 
  - "Down" the tree: now \( \text{him is not from up a down tree so can be considered synthesized from right side terminal.} \)

(b) \( E \text{ V=0} \) 

\( E \text{ V=4} \) 

\( E \text{ V=4} \) 

- \( \text{Value} = 6 \) 
- \( \text{Value} = 4 \) 

8. 

(a) FORTH 

(b) POSIFIX 

(c) Both true & false can be answered depending on how you interpreted this 

(h) Many ways 

(i) True