

a) $1 - 2 + 3 - 2$

$$\begin{array}{c} \boxed{} \\ \text{op} \end{array} 1 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 12 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 12- \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 12-3 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 12-3+ \\ \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 12-3+2-$$

b) $(2^3)^2$

$$\begin{array}{c} \boxed{} \\ \text{op} \end{array} 2 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 2 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23 \xrightarrow{\text{pop's with 3}} \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23^ \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23^2 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23^2^$$

c) 2^3^2

$$\begin{array}{c} \boxed{} \\ \text{op} \end{array} 2 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 2 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23^ \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23^2 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 23^2^$$

d) $(2+6) / 3 - (32+4*7)*2$

$$\begin{array}{c} \boxed{} \\ \text{op} \end{array} 2 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 2 \xrightarrow{\text{pop's action}} \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+ \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/$$

$$\rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/32 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/324 \xrightarrow{\text{pop's action}} \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/324*$$

$$\rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/3247 \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/3247* \rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/3247*2$$

$$\rightarrow \begin{array}{c} \boxed{} \\ \text{op} \end{array} 26+3/3247*2- \rightarrow \begin{array}{c} \boxed{} \\ \text{ed} \end{array} 26+3/3247*2-$$