$$D\ 9\ 8\ 9\ \checkmark$$

$$9\ \overline{)\ 7\ A\ 5\ D\ 1}$$

$$\begin{array}{r} 75 \downarrow \\ \hline 55 \\ 51 \downarrow \\ \hline 4D \\ 48 \downarrow \\ \hline 5\ 1 \\ 5\ 1 \\ \hline 0\ \checkmark \end{array}$$

1) $7A \rightarrow B_{10}$

$7 \times 16 = 112 + 10 = 122_{10}$

$122/9 = 13.\overline{555}\quad 13 = D$

$D(13) * 9 = 117/16 = 7R5$

$7A_{16} - 75_{16} = 5$

2) $55 \rightarrow B_{10}$

$5 \times 16 = 80 + 5 = 85$

$85/9 = 9.\overline{444}$

$9 * 9 = 81/16 = \underline{5\,R1}$

$55_{16} - 51_{16} = 4_{16}$

3) $4D \rightarrow B_{10}$

$4 \times 16 = 64 + 13 = 77_{10}$

$77/9 = 8.\overline{5555}$

$8 * 9 = 72_{10}/16 = \underline{4\,R8}$

$4D_{16} - 48_{16} = 5_{16}$

4) $51_{16} \rightarrow B_{10}$

$5 * 16 = 80 + 1 = 81_{10}$

$81/9 = 9_{10} \rightarrow 9_{16}$

$9_{10} \times 9_{10} = 81_{10}\quad 81/16 = \mathbf{51}_{16}$