Question:

What is product of 9/10x6/18x5/14.

Solution.

$$\frac{9}{10} \times \frac{6}{18} \times \frac{5}{14} = \frac{3 \times 3}{2 \times 5} \times \frac{2 \times 3}{3 \times 3 \times 2} \times \frac{5}{2 \times 7} = \frac{2 \times 3 \times 3 \times 3 \times 5}{2 \times 2 \times 2 \times 3 \times 3 \times 5 \times 7} = \frac{3}{2 \times 2 \times 7} = \frac{3}{28}.$$

We factor denominators $10 = 2 \times 5$, $18 = 3 \times 3 \times 2$, $14 = 2 \times 7$; factor numerators $9 = 3 \times 3$, $6 = 2 \times 3$. Then multiply all numerators (3×3, 2×3, 5) and get $2 \times 3 \times 3 \times 3 \times 5$. Multiply all denominators (2×5, $3 \times 3 \times 2$, 2×7) and get $2 \times 2 \times 2 \times 3 \times 3 \times 5 \times 7$. Simplify fraction $\frac{2 \times 3 \times 3 \times 3 \times 5}{2 \times 2 \times 2 \times 3 \times 3 \times 5 \times 7}$, this yields fraction $\frac{3}{2 \times 2 \times 7}$, i.e. $\frac{3}{28}$.

Answer. $\frac{3}{28}$.