

8/11/13

CÀLCUL AMB FRACCIONS

$$\begin{aligned}
 \text{a)} \quad & \frac{3}{5} \cdot \frac{2}{4} + \frac{1}{9} \cdot \frac{5}{6} - \frac{1}{12} = \\
 & = \frac{6}{20} + \frac{6}{45} - \frac{1}{12} = \frac{54}{180} + \frac{24}{180} - \frac{30}{180} = \frac{78-30}{180} = \frac{48}{180} = \boxed{\frac{4}{15}}
 \end{aligned}$$

$$\begin{aligned}
 \text{b)} \quad & \frac{2}{5} + \frac{3}{4} \cdot \frac{1}{6} - \frac{8}{3} \cdot \frac{1}{4} = \\
 & = \frac{2}{5} + \frac{3}{24} - \frac{8}{12} = \frac{48}{120} + \frac{15}{120} - \frac{80}{120} = \frac{63-80}{120} = \boxed{\frac{-17}{120}}
 \end{aligned}$$

$$\begin{aligned}
 \text{c)} \quad & \frac{\frac{1}{5} + \frac{3}{8}}{\frac{6}{5} - \frac{4}{3}} = \frac{\frac{8}{40} + \frac{15}{40}}{\frac{18}{15} - \frac{20}{15}} = \frac{\frac{23}{40}}{\frac{-2}{15}} = \frac{23}{40} : \frac{-2}{15} = \frac{345}{-80} = \boxed{\frac{69}{-16}}
 \end{aligned}$$

$$\begin{aligned}
 \text{d)} \quad & \frac{1 - \frac{4}{3}}{3 - \frac{6}{5}} = \frac{\frac{3}{3} - \frac{4}{3}}{\frac{15}{5} - \frac{6}{5}} = \frac{\frac{-1}{3}}{\frac{9}{5}} = \frac{-1}{3} : \frac{9}{5} = \boxed{\frac{-5}{27}}
 \end{aligned}$$

$$\begin{aligned}
 \text{e)} \quad & \left(\frac{6}{7} + \frac{2}{3} \right) : \left(\frac{5}{8} - \frac{6}{5} \right) + \frac{1}{4} = \\
 & = \left(\frac{18}{21} + \frac{14}{21} \right) : \left(\frac{25}{40} - \frac{48}{40} \right) + \frac{1}{4} = \\
 & = \frac{32}{21} : \frac{-23}{40} + \frac{1}{4} = \frac{-1280}{483} + \frac{1}{4} = \frac{-5120}{1932} + \frac{483}{1932} = \boxed{\frac{-4637}{1932}} =
 \end{aligned}$$