

CORRIGE - Notre Dame de La Merci - Montpellier

Réaliser les calculs suivants :

$$A = \frac{\frac{1}{2} + 7}{\frac{3}{4} \times \frac{2}{5}} = \frac{\frac{1}{2} + \frac{7}{1}}{\frac{3 \times 2}{4 \times 5}} = \frac{\frac{1}{2} + \frac{7 \times 2}{1 \times 2}}{\frac{3 \times \boxed{2}}{2 \times \boxed{2}} \times 5} = \frac{\frac{1}{2} + \frac{14}{2}}{\frac{3}{10} \times \frac{15}{10}} = \frac{\frac{15}{2}}{\frac{3}{2} \times \frac{10}{3}} = \frac{15 \times 10}{2 \times 3} = \frac{15 \times 10}{\boxed{2} \times \boxed{3}} = 25$$

$$B = \frac{\frac{5}{1} \times \frac{4}{3}}{\frac{4}{5} - \frac{3}{4}} = \frac{\frac{5 \times 4}{3 \times 7}}{\frac{1 \times 5}{4 \times 5} - \frac{3 \times 4}{5 \times 4}} = \frac{\frac{20}{21}}{\frac{5}{20} - \frac{12}{20}} = \frac{\frac{20}{21}}{-\frac{7}{20}} = \frac{20}{21} \times \left(-\frac{20}{7} \right) = -\frac{20 \times 20}{21 \times 7} = -\frac{400}{147}$$

$$C = 2 + \frac{\frac{3}{4} + 2 \times \frac{3}{8}}{\frac{-7}{2} \times \frac{5}{3}} = 2 + \frac{\frac{3}{4} + \frac{2 \times 3}{8}}{\frac{-7 \times 5}{2 \times 3}} = 2 + \frac{\frac{3}{4} + \frac{\boxed{2} \times 3}{\boxed{2} \times 4}}{\frac{-35}{6}} = 2 + \frac{\frac{3}{4} + \frac{3}{4}}{\frac{-35}{6}} = 2 + \frac{\frac{6}{4}}{\frac{-35}{6}} = 2 + \frac{\frac{\boxed{2} \times 3}{\boxed{2} \times 2}}{\frac{-35}{6}} = 2 + \frac{\frac{3}{2}}{\frac{-35}{6}}$$
$$= 2 + \frac{3}{2} \times \left(-\frac{6}{35} \right) = 2 - \frac{3 \times 6}{2 \times 35} = 2 - \frac{3 \times \boxed{2} \times 3}{\boxed{2} \times 35} = 2 - \frac{9}{35} = \frac{2 \times 35}{1 \times 35} - \frac{9}{35} = \frac{70}{35} - \frac{9}{35} = \frac{61}{35}$$