

Niveau 1 :

$$A = \frac{2}{3} + \frac{5}{3}$$

$$= \frac{7}{3}$$

$$B = \frac{2}{3} \times \frac{5}{3}$$

$$= \frac{2 \times 5}{3 \times 3}$$

$$= \frac{10}{9}$$

$$C = \frac{-2}{3} - \frac{5}{3}$$

$$= -\frac{7}{3}$$

$$D = \frac{5}{6} - \frac{4}{9}$$

$$= \frac{5 \times 3}{6 \times 3} - \frac{4 \times 2}{9 \times 2}$$

$$= \frac{15}{18} - \frac{8}{18}$$

$$= \frac{7}{18}$$

$$E = \frac{53}{30} - \left(\frac{6}{10} + \frac{8}{10} \right)$$

$$= \frac{53}{30} - \frac{14}{10}$$

$$= \frac{53}{30} - \frac{14 \times 3}{10 \times 3}$$

$$= \frac{53}{30} - \frac{42}{30}$$

$$= \frac{11}{30}$$

$$F = \frac{53}{30} - \frac{6}{10} + \frac{8}{10}$$

$$= \frac{53}{30} - \frac{6 \times 3}{10 \times 3} + \frac{8 \times 3}{10 \times 3}$$

$$= \frac{53}{30} - \frac{18}{30} + \frac{24}{30}$$

$$= \frac{59}{30}$$

Niveau 2 :

$$G = \frac{\frac{7}{-5}}{\frac{4}{3}}$$

$$= -\frac{7}{5} \times \frac{4}{3}$$

$$= -\frac{28}{15}$$

$$H = \frac{5}{6} - \frac{7}{3} \div \frac{1}{4}$$

$$= \frac{5}{6} - \frac{7}{3} \times \frac{4}{1}$$

$$= \frac{5}{6} - \frac{28}{3}$$

$$= \frac{5}{6} - \frac{28 \times 2}{3 \times 2}$$

$$= \frac{5}{6} - \frac{56}{6}$$

$$= -\frac{51}{6}$$

$$I = \frac{7}{6} \times \frac{7}{2} - \frac{3}{2}$$

$$= \frac{49}{12} - \frac{3}{2}$$

$$= \frac{49}{12} - \frac{3 \times 6}{2 \times 6}$$

$$= \frac{49}{12} - \frac{18}{12}$$

$$= \frac{31}{12}$$

$$J = \left(\frac{8}{5} + \frac{4}{9} \right) \times \frac{3}{5}$$

$$= \left(\frac{8 \times 9}{5 \times 9} + \frac{4 \times 5}{9 \times 5} \right) \times \frac{3}{5}$$

$$= \left(\frac{72}{45} + \frac{20}{45} \right) \times \frac{3}{5}$$

$$= \frac{92}{45} \times \frac{3}{5}$$

$$= \frac{92}{15} \times \frac{1}{5}$$

$$= \frac{92}{75}$$

$$K = 3 + \frac{-2}{11}$$

$$= \frac{3 \times 11}{1 \times 11} - \frac{2}{11}$$

$$= \frac{33}{11} - \frac{2}{11}$$

$$= \frac{31}{11}$$

$$L = \frac{7}{6} \times \left(\frac{7}{2} - \frac{3}{2} \right)$$

$$= \frac{7}{6} \times \frac{4}{2}$$

$$= \frac{7}{6} \times 2$$

$$= \frac{7}{3}$$

Niveau 3 :

$$\begin{aligned}M &= \frac{3}{35} + \frac{17}{14} - \frac{23}{10} \\&= \frac{3 \times 2}{35 \times 2} + \frac{17 \times 5}{14 \times 5} - \frac{23 \times 7}{10 \times 7} \\&= \frac{3}{35} + \frac{17}{14} - \frac{23}{10} \\&= \frac{6}{70} + \frac{85}{70} - \frac{161}{70} \\&= -\frac{70}{70} \\&= -1\end{aligned}$$

$$\begin{aligned}N &= \left(\frac{1}{8} - \frac{7}{12} \right) \div \left(\frac{7}{6} + \frac{7}{16} \right) \\&= \left(\frac{1 \times 3}{8 \times 3} - \frac{7 \times 2}{12 \times 2} \right) \div \left(\frac{7 \times 8}{6 \times 8} + \frac{7 \times 3}{16 \times 3} \right) \\&= \left(\frac{3}{24} - \frac{14}{24} \right) \div \left(\frac{56}{48} + \frac{21}{48} \right) \\&= -\frac{11}{24} \div \frac{77}{48} \\&= -\frac{11}{24} \times \frac{48}{77} \\&= -\frac{11 \times 24 \times 2}{24 \times 11 \times 7} \\&= -\frac{2}{7}\end{aligned}$$

$$\begin{aligned}O &= \frac{2 + \frac{1}{3}}{2 - \frac{1}{3}} + \frac{1}{3} \\&= \frac{\frac{2 \times 3}{1 \times 3} + \frac{1}{3}}{\frac{2 \times 3}{1 \times 3} - \frac{1}{3}} \\&= \frac{\frac{6}{3} + \frac{1}{3}}{\frac{6}{3} - \frac{1}{3}} \\&= \frac{\frac{7}{3}}{\frac{5}{3}} \\&= \frac{7}{3} \times \frac{3}{5} \\&= \frac{7}{5}\end{aligned}$$