

Correction du devoir n°6 - Semaine

$$\text{Ex 1: 1) } \frac{15}{7} - \frac{8}{7} = \frac{7}{7} = \textcircled{1}$$

$$3) \frac{1}{6} + \frac{3}{18} - \frac{3}{9}$$

$$= \frac{3}{18} + \frac{3}{18} - \frac{6}{18} = \textcircled{0}$$

$$4) \frac{15}{8} - \left(\frac{1}{4} + \frac{1}{8} \right)$$

$$= \frac{15}{8} - \left(\frac{2}{8} + \frac{1}{8} \right)$$

$$= \frac{15}{8} - \frac{3}{8} = \frac{12}{8} = \textcircled{\frac{3}{2}}$$

$$7) \frac{9}{48} \times \frac{16}{15}$$

$$= \frac{\cancel{3} \times \cancel{3} \times 16}{16 \times \cancel{3} \times \cancel{3} \times 5} = \textcircled{\frac{1}{5}}$$

$$9) \left(\frac{9}{4} - \frac{3}{4} \right) \times \frac{2}{3}$$

$$= \frac{6}{4} \times \frac{2}{3} = \frac{12}{12} = \textcircled{1}$$

$$10) \frac{4}{5} \times \left(4 - \frac{3}{2} \right)$$

$$= \frac{4}{5} \times \left(\frac{8}{2} - \frac{3}{2} \right)$$

$$= \frac{4}{5} \times \frac{5}{2} = \frac{4 \times \cancel{5}}{\cancel{5} \times 2} = \frac{4}{2} = \textcircled{2}$$

$$12) \left(\frac{11}{14} + \frac{2}{7} \right) \times \frac{21}{20}$$

$$= \left(\frac{11}{14} + \frac{4}{14} \right) \times \frac{21}{20}$$

$$= \frac{15}{14} \times \frac{21}{20} = \frac{\cancel{5} \times 3 \times \cancel{7} \times 3}{2 \times \cancel{7} \times \cancel{2} \times 4} = \textcircled{\frac{9}{8}}$$

$$2) \frac{3}{20} + \frac{5}{4} + \frac{3}{5} \quad \textcircled{13}$$

$$= \frac{3}{20} + \frac{25}{20} + \frac{12}{20}$$

$$= \frac{40}{20} = \textcircled{2}$$

$$5) \frac{1}{4} + \frac{3}{4} \times 3$$

$$= \frac{1}{4} + \frac{9}{4} = \frac{10}{4} = \textcircled{\frac{5}{2}}$$

$$6) \frac{14}{5} \times \frac{10}{7} + \frac{5}{3}$$

$$= \frac{2 \times \cancel{7} \times \cancel{2} \times 2}{\cancel{7} \times \cancel{5}} + \frac{5}{3}$$

$$= 4 + \frac{5}{3} = \frac{12}{3} + \frac{5}{3} = \textcircled{\frac{17}{3}}$$

$$8) \frac{4}{5} \times \frac{15}{2} \times \frac{1}{12}$$

$$= \frac{4 \times \cancel{3} \times \cancel{3} \times 1}{\cancel{5} \times 2 \times \cancel{4} \times \cancel{3}} = \textcircled{\frac{1}{2}}$$

$$11) \frac{24}{5} \times \left(\frac{5}{3} - \frac{5}{6} \right)$$

$$= \frac{24}{5} \times \left(\frac{10}{6} - \frac{5}{6} \right)$$

$$= \frac{24}{\cancel{5}} \times \frac{\cancel{4}}{6} = \frac{24}{6} = \textcircled{4}$$

Ex 2 : (17)

1) $\frac{1}{6} + \frac{1}{12} = \frac{2}{12} + \frac{1}{12} = \frac{3}{12} = \frac{1}{4}$
 $\frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$

On verse un $\frac{1}{2}$ L de limonade dans la bouteille

2) a) $\frac{7}{12} \times 24 = \frac{7 \times 2 \times 12}{12} = 14$

il y a 14 filles dans la classe

$24 - 14 = 10$ donc 10 garçons

b) $\frac{3}{5} \times 10 = \frac{3 \times 10}{5} = \frac{30}{5} = 6$

il y a 6 garçons aux jeux maillons

3) Après avoir perdu $\frac{11}{15}$ de sa récolte, il reste $\frac{4}{15}$ au cultivateur

$\frac{3}{4}$ de $\frac{4}{15} \rightarrow \frac{3}{4} \times \frac{4}{15} = \frac{3 \times 4}{4 \times 3 \times 5} = \frac{1}{5}$

Il perd $\frac{1}{5}$ de sa récolte au marché

$\frac{11}{15} + \frac{1}{5} = \frac{11}{15} + \frac{3}{15} = \frac{14}{15}$

Il lui reste $\frac{1}{15}$ de sa récolte